

AN INVESTIGATION OF K-12 STRING TEACHERS' PERCEPTIONS
OF MUSICAL OUTREACH AND THE NATIONAL STRING
PROJECT CONSORTIUM IN DETROIT, MICHIGAN

BY

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Dedicated to my late grandfathers,
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for exposing me to research and scientific study from an early age,
and
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**An Investigation of K-12 String Teachers' Perceptions of Musical
Outreach and the National String Project Consortium
in Detroit, Michigan**

The purpose of this study was to explore K-12 string teachers' perceptions of and experiences with the String Project at Wayne State University in Detroit, Michigan. Surveys were sent via email or USPS to 53 K-12 String Teachers at 77 Public, Private or Charter schools within a 10-mile radius of Wayne State University. Of these teachers, a total of eight responded that their school no longer offered strings or they were incorrectly identified as a string teacher, reducing the actual number of potential participants to 45. Eight surveys were returned for a response rate of 18%. Four of the respondents and the String Project director were then emailed two follow-up questions. One teacher and the String Project director responded. The survey was a researcher designed questionnaire that gathered information regarding classes taught, number of students enrolled in, and opinions of the String Project at Wayne. The findings showed that, within the Detroit area, school string programs are located sporadically and vary widely in terms of numbers and settings. Additionally, less than 1% of students identified are dually enrolled in their school programs and the String Project at Wayne. This points to a lack of communication and collaboration between the String Project and the K-12 schools/teachers as well as between the city and suburbs. This has implications for the continued growth of the String Project at Wayne as well as String Projects beginning in similar cities and other outreach organizations within the Detroit area.

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Chapter I

Statement of the Problem

Introduction/Background

Collaboration and outreach between universities and surrounding communities have been standard practice since the formation of land-grant universities in the 1800s (Dyer, 1999). Outreach has been defined as educational structures designed to reach students not who are not normally part of regular daytime college campus credit work, (James & Fagaly, 1972) including but not limited to K-12 student populations. Music outreach programs, specifically string programs, are present around the country (Freiberg, 1999; Robinson, 1998) and are currently being encouraged by the American String Teachers Association (ASTA). Successful programs have also been documented in Canada (Babineau, 2000; Royer, 2007), England (Kite, 1990; Renshaw, 1986; Ruffer, 1988), and Australia (Murphy, Rickard, Gill & Grimmatt, 2011).

Outreach programs established by symphony orchestras and other arts organizations such as the National Endowment for the Arts (NEA) are also becoming more common and more visible than they have been in the past. The NEA's Rural Residency Program places up-and-coming quartets, such as the Ying Quartet, in rural towns to teach strings (Dossa, 1997) and the New Horizons program has begun to offer orchestra programs for retired amateur string players (Freiberg, 2002).

Freiberg (2002) writes that there are New Horizons orchestras in Rochester, NY; Iowa City, IA; and Howard County, MD, which offer orchestral and private instruction at various levels. The New Horizons website (New Horizons International Music Association, 2006) also shows orchestra programs in Tuscaloosa, AL; Bethesda, MD;

Port Huron, MI; Minneapolis, MN; Las Cruces, NM; Hempstead, NY; Yellow Springs, OH; Provo, UT; Spokane, WA; Appleton, WI; Madison, WI; and Peterborough, Ontario.

Other community music organizations are providing musical outreach programs to varying age groups. The Lucy Moses School Suzuki Program in New York City has begun a partnership with the Lincoln Square Neighborhood Center, providing free Suzuki lessons to interested parents and children through a scholarship program (Rothenberg, 2004). Likewise, the La Jolla Chamber Music Society in San Diego, CA sponsors the Community Music Center which provides free music lessons and instruments for at-risk elementary-aged children. According to their website (La Jolla Chamber Music Society, n.d.), the Community Music Center provides bilingual instruction (Spanish and English) on all standard orchestral instruments and guitar. Parents are required to help with things such as set-up, attendance, fund-raisers, chaperoning field trips, and cultural events. Some adult education classes are also offered. If students meet musical goals and attendance requirements, they are given their instrument upon graduation from the two-year program.

Education departments of symphony orchestras also play a large role in providing outreach opportunities for K-12 students. The Dallas Symphony Orchestra's Young Strings Program works directly with the Dallas Independent School District and provides free lessons to talented minority students in grades K-12 (Winsenreid, 2003). This program also provides free concert tickets, master classes, and workshops with the symphony's guest artists, and an instrument loan bank of free, high quality instruments for the students. Both students and their parents must sign an annual contract agreeing to

practice, participate in the program's activities, and maintain a minimum grade-point average in school.

Lastly, collegiate schools of music and conservatories are beginning to become involved in music at a community level. Undercofler (1997) points out several reasons why he feels this is more effective than programs sponsored by orchestras. He includes the fact that academic institutions, due to their more ample resources in terms of personnel and facilities, are able to provide more broad and comprehensive programs that are less temporary in nature than programs sponsored by orchestras.

School-University partnerships have become an essential part of teacher education (Burton & Greher, 2007). Collaborative efforts between schools and universities result in a way for pre-service teachers to connect theory and practice (Abrahams, 2001), and develop cultural competency (Burton, 2011). They have also been used to promote the use of technology (Greher, 2011), and inform educational policy (Carlisle, 2011; Hunter, 2011).

Schools of music such as the Longy School of Music and the Eastman School of Music (ESM) are beginning to offer not only intensive pedagogical training for performers and music teachers, but also community music classes. Longy, in Cambridge, Massachusetts, offers classes for students from age one through masters' and diploma programs. They also offer programs for amateur adults of all ages. Additionally, string students in all degree programs must take a year of teacher training that includes academic study and hands-on experience. Performance majors, like music education majors, will leave equipped to teach string students at all levels, rather than just to perform (Freiberg, 1999).

In the program at ESM, string education majors provide group classes to third-grade students in the Rochester Public Schools, while performance majors provide private lessons. This not only fosters rapport between future public-school teachers and private teachers but also gives the students an opportunity to observe and critique their peers. ESM has also hired the Ying Quartet to give chamber music coachings as well as teach general techniques for community outreach (Dossa, 1997).

In Bloomington, Indiana, a collaborative effort between Indiana University's Jacobs School of Music (IU) and the Monroe County Community School Corporation has led to the Fairview Violin Project at Fairview Elementary School (Brenner, 2011; Williams, 2011). The project tracks the academic progress in reading and math as well as the attendance and behavior of economically disadvantaged first- and second-graders who receive violin instruction instead of general music instruction. Each week, all students receive large group lessons during their normal general music time and a small group lesson during their recess time. The length of lessons has varied during the course of the program. Instruments, which are donated by the Summer Star Foundation, do not go home with the students. The Summer Star Foundation also provides funding for student instructors from IU (Brenner, 2011). Some of the original students have continued to take lessons into the third and fourth grades, at which time they are allowed to take the instruments home (Williams, 2011).

The American String Teachers Association (ASTA) with the National School Orchestra Association has worked to create String Projects based on the outreach program at the University of South Carolina (Jesselson, 1988; Reel, 2004). The National String Project Consortium (NSPC) was created in 1999, and a year later the consortium

created 13 String Projects through a grant from the United States Department of Education's Fund for Improvement of Post-Secondary Education (Byo & Cassidy, 2005). Currently, the NSPC is an independent non-profit organization that works "together with ASTA and other music organizations to serve string education and string development across the United States (National String Project Consortium, 2006)." According to the NSPC's website, these projects are designed to provide valuable learning experiences for string education majors, promote string teaching, and aid in the development of surrounding K-12 string programs. There are currently 35 String Projects across the country and eight new sites waiting for funding.

Wayne State University lies in Detroit's midtown neighborhood, the cultural center of the city. It comprises over 100 buildings on 200 acres, in a high-density commercial and residential area that is also home to Detroit Institute of the Arts, the Charles H. Wright Museum of African American History, the Max M. Fisher Music Center (home of the Detroit Symphony Orchestra), the Detroit Public Library, several hospitals including Detroit Medical Center and the Henry Ford Health System, and the Eastern Market, a large produce market that caters to both commercial and retail customers (Wayne State University, 2012). Created in 2008, the String Project at Wayne was named the String Project of the Year in 2011, and currently enrolls approximately 150 students (String Project at Wayne, 2012).

Students in the String Project at Wayne are accepted as beginners in third through fifth grade. In the first two levels of instruction, they attend like-instrument group classes two times each week, with a mixed ensemble meeting every few weeks. By the time they reach the third level, in or around eighth grade, their small group class and large

ensemble both meet once a week. After eighth grade, students are encouraged to transition to one of the Detroit Symphony's Civic Youth Ensembles or one of the many other youth orchestras in the area. The String Project performs two concerts each year, in December and May, on the stage of the Max M. Fisher Music Center (String Project at Wayne, 2012).

Problem Statement

Very little research focuses specifically on string education outreach. Researchers have examined the breadth of musical outreach programs (Henry, 2001; Undercofler, 1998) as well as the effect of these programs on the college students involved (Bowers 2001; Gregory, 1995; Henry 2001). Other studies have focused on programs at specific schools, such as New England Conservatory (Dossa, 1997), Eastman School of Music (Robinson, 1998), and Millikin University (Shaw, 1998a; Shaw, 1998b).

More recently, Byo and Cassidy (2005) examined the role of the string project in teacher training and community music education and several studies have surveyed different aspects of the undergraduate experience as a string project teacher (Ferguson, 2003; Schmidt, 2005). Davis (2011) completed an in-depth case study of the University of South Carolina String Project, but chose only to focus on participants who had weekly interactions with the String Project.

No research has been found to date regarding either the K-12 string teachers' views of or experiences with outreach or their perceptions of its impact on their classroom. Additionally, no research has been found to date that documents the experiences of K-12 teachers with ASTA's String Projects or their perceptions of these

projects.

Purpose Statement

In order to explore K-12 string teachers' perceptions of and experiences with ASTA's String Projects, this descriptive case study focused on the String Project at Wayne State University (Detroit, Michigan) and the string teachers in public, private, and charter schools within a 10-mile radius of the project. The string teachers' outlook towards and perception of the String Project at Wayne State University were investigated, demographics pertaining to String Project participants were collected, and the percentage of K-12 string students from schools included in the study who are currently or were previously in the String Project were determined.

A survey modeled after one published by Gregory (1992) was created for use in this study. This new survey instrument, the Measure of String Project Perceptions in Detroit (MSPPD), was sent to all string teachers in the school districts within a 10-mile radius of the NSPC String Project at Wayne State University in Detroit, Michigan. Through the use of both quantitative questions and follow-up qualitative open-ended responses this study explored K-12 string teachers' perceptions and opinions of outreach programs to ascertain views concerning the perceived benefits and drawbacks of such programs for public, private, and charter school string classes. It also served to determine the accessibility of the String Project to the students in the neighboring school systems.

Research Questions

1. Who are the string teachers in K-12 schools in the Detroit area and what types of classes do they teach?

2. Overall, how do string teachers in the Detroit area view the String Project at Wayne State University?
3. What is the perceived influence of the String Project on the public, private, and charter school programs in the Detroit area? How do the K-12 string teachers perceive the String Project's impact on their students' learning? If there are string teachers who participated in the String Project as college students, does their perception differ from those teachers who have no known association with the String Project?
4. What percentage of string students enrolled in neighboring schools also participate in String Project activities? Does this vary by school level (elementary vs. middle vs. high school)? Does this vary by type of school (public vs. private vs. charter school)?
5. What sort of communication, if any, exists between the K-12 string teachers and the String Project? Is there a relationship between the K-12 teachers and the String Project? Are K-12 string teachers aware of whether their students do or do not participate in the String Project?

Definitions

For the purpose of this study, these words will be defined as follows:

Outreach: A systematic attempt (by a university, symphony orchestra or arts organization) to provide services beyond conventional limits, as to particular segments of a community (K-12 string classes) (American Heritage Dictionary, 1985, p.883).

String Project: A member of the National String Project Consortium. An after-school/weekend program that provides teaching experiences to college string majors while promoting string playing for pre-college students and helping to develop K-12 string programs. (ASTA)

Delimitations

This study will focus on string teachers within a 10-mile radius of the String Project at Wayne State University. Because of the popularity of charter schools, magnet schools, and private schools in the Detroit metro area, these schools will be included. However, juvenile detention centers, hospital schools, head start programs, and other institutions that may attract a specialized group have been excluded from this population.

Using the United States Department of Education website, the researcher identified 501 public, private, and charter schools within a 10-mile radius of the String Project at Wayne State University. This was cross-referenced with school websites and verified by school office personnel to determine which schools have string programs. (See Appendix C) This resulted in 77 schools with 53 teachers. The MSPPD was emailed to any teacher within the 10-mile radius that was identified as a strings/orchestra teacher. If a teacher did not have an email address available, the MSPPD was sent via United States Postal Service to the school's mailing address. The anticipated response rate was at least 60%.

Chapter II

Review of Literature

Status of School String Programs

Gillespie and Hamann (1998) gathered descriptive information about orchestra programs in the United States in hopes that the data could be used as a baseline for decision-making about how to meet the needs of string programs in the schools. Using a 44-question instrument, they sent surveys to string teachers at 1,345 schools in all 50 states. The schools were randomly selected from a list of 9,415 secondary school orchestra programs compiled by four major publishing companies. The teachers were surveyed about the demographics of their programs, program organization, curriculum, students, repertoire, and teacher profiles. Seventy-two surveys were returned with incorrect addresses or because the string program no longer existed. Of the remaining surveys, 32% were returned and after a second mailing, surveys from 44 states were returned, resulting in an overall return rate of 51%. Due to the poor response rate, results need to be interpreted with caution.

While much descriptive data were gathered about string programs, the results from Gillespie and Hamann's (1998) study that inform the present study are those concerning program support. String teachers perceive that the parents of their students are the most supportive group as compared to local performers and local colleges. On a scale of one (no support) to five (extremely supportive), parents are given a mean of 3.87 ($SD = 1.03$). On the contrary, professional local performers and local colleges had means of 2.81 ($SD = 1.81$) and 2.43 ($SD = 1.33$) respectively. The authors recommended that

string teachers meet with local college music faculty to discuss how a college could be more supportive. The development of String Projects and other similar outreach programs are examples of a realization of this recommendation.

As stated above, a primary shortcoming of the study by Gillespie and Hamann (1998) was the low return rate. The authors also acknowledged this and recommended that the study be replicated with a larger sample and the aim of a higher return rate. Hamann, Gillespie, and Bergonzi replicated the study in 2002.

The purpose of the second study, sponsored in part by the American String Teachers Association with the National School Orchestra Association (ASTA with NSOA), was to assess the status of string instruction in the United States (Hamann, Gillespie, & Bergonzi, 2002). They surveyed string teachers from a national sample of school programs. From a total population of 8,556 schools, a random sample of 25% ($n = 2,139$) was selected. The survey was based on Gillespie and Hamann's 1998 study and three models were constructed, assessed, and pilot-tested before the final survey was administered. The final revisions resulted in 49 questions in five categories: orchestra teacher profile, orchestra program profile, orchestra program support, staffing and hiring practices, and students.

Hamann, Gillespie, and Bergonzi (2002) sent surveys, a cover letter and a self-addressed stamped envelope to 2,139 schools. After 3 1/2 weeks, if the survey was not returned a second packet was sent out with a revised cover letter. A third packet was sent after an additional 3 1/2 weeks. Over this four-month period, 920 surveys were returned with a return rate of 43%. Again, this response rate was poor and results should be interpreted with caution. The survey used by the researchers was quite long. Therefore a

shorter survey might have produced a higher response rate. As concluded by Hamann, Gillespie and Bergonzi, teachers who have very little time cannot realistically be expected to fill out a survey that is more than ten pages long, even if it is for a worthy cause.

Unfortunately, Hamann, Gillespie, and Bergonzi (2002) did not give teachers the opportunity to rate local professionals or local colleges in terms of support. Relevant findings demonstrate an increasing need for string teachers. Of the surveyed teachers, 21% had primary teaching areas other than strings and 12 to 21% (depending on grade level) did not play a string instrument as their primary instrument. Additionally, during the 1999-2000 school year, only 72% of teaching positions were filled with teachers who played a string instrument, and 10% of the positions were filled with uncertified teachers. During the same year, 24% of string openings were not filled at all and during the 2000-2001 school year 43% of openings went unfilled. Overall, between 1999 and 2001, most school systems reported difficulty in finding qualified string teachers.

Hamann, Gillespie, and Bergonzi (2002) mentioned ASTA's String Projects in relation to this alarming teacher shortage, but did not discuss their role in detail, nor did they survey any of the teachers about their students' involvement in the projects. These projects are designed to promote string teaching and develop string teachers and school programs, but little data are available as to their effectiveness.

Outreach and Collaboration Research

Perhaps the lack of research regarding musical outreach programs contributes to the exclusion of outreach from broad studies (Gillespie & Hamann, 1998; Hamann, Gillespie, & Bergonzi, 2002). For instance, one review of string teaching and

performance research findings (Nelson, 1983) does not mention outreach programs at all. A content analysis of doctoral research (Kantorski, 1995) revealed very little about outreach.

Kantorski (1995) analyzed the contents of all doctoral research published in Dissertation Abstracts International (DAI) between 1936 and 1992 that related to string education. Using keywords associated with violin, viola, cello and double bass, Kantorski searched the DAI index from 1861-1992. Of 737 dissertation titles, 485 were excluded because they were not relevant to education and an additional 55 did not have abstracts, thus resulting in 197 dissertation abstracts on the topic of string education. In a preliminary analysis of 25 randomly selected abstracts, the following nine topic areas were identified: (a) curriculum designs/instructional strategies; (b) methods; (c) string class; (d) techniques and skills; (e) etudes, exercises, and excerpts; (f) performance practice; (g) teacher education; (h) string programs; and (i) information resources. After determining the above categories, all abstracts were analyzed in order to categorize them. In most cases, a given dissertation fit in multiple categories. Overall, the three least researched areas, accounting for only 12% of dissertations, were string class, teacher education, and string programs. Teacher education research and string program research, both components of outreach activities, separately consist of 3% each (Kantorski, 1995).

Curious as to what creates a successful partnership versus an unsuccessful one, Burton and Greher (2007) reviewed the literature on school-university partnerships, though they do not describe how studies were identified for inclusion in the review. Based on this review, a research agenda was proposed focusing on (a) the developmental nature of the collaborative process, (b) the quality of that process, (c) the outcomes of

that process, and (d) the perspective of all parties involved. It is the last category to which the current study relates.

Burton and Greher (2007) begin with describing rationales for education partnerships before focusing on ideal models for collaboration. Based on the medical profession's partnership between a medical school and hospital, the professional development school (PDS) has been proposed multiple times as an avenue to teacher education reform. Burton and Greher define a PDS as an "educational collaboration that uses resources, power, authority, interests, and people from separate organizations to create a new organizational entity for the purpose of achieving common goals" (p. 15), that's purpose is to (a) maximize student learning and achievement, (b) enhance exemplary practice, (c) engage in meaningful professional development, and (d) prepare effective new teachers. Based on this definition, the String Projects are not true partnerships because they do not really use resources or teachers from different organizations.

The bulk of research that Burton and Greher (2007) describe focuses on preservice teachers. Studies were examined that show many benefits for preservice teachers, including (a) increased effectiveness in the classroom; (b) becoming part of the educational or school community; (c) more opportunities for field experiences; (d) more feedback, supervision, and informal guidance; and (e) the development of instructional, differentiation, assessment, and classroom management strategies.

Less research focuses on the experience of the teacher in the PDS. The research reviewed indicates that in-service teachers are more likely to improve their own teaching practice and more likely to continue with professional development, including conducting

action research (Burton & Greher, 2007). This seems like a moot point when continued professional development is frequently required by districts and state licensing boards alike.

Burton and Greher (2007) suggest a multitude of research questions to be pursued in the future. These questions focus on preservice teachers, higher education and faculty, P-12 students, and in-service teachers as well as collaboration itself. Not surprisingly, the largest number of questions are asked regarding in-service teachers, including, “What are the outcomes, in terms of benefits or losses, that in-service music teachers realize as a result of participation in PDS work?” (p.20). This relates closely to the current study because a K-12 teachers’ perception of the String Project, or another other outreach program, includes the perception of benefits or losses of working with that organization.

Symphonic Outreach Programs

Outreach programs and partnerships with schools are commonplace in the educational departments of most symphony orchestras; however the majority of the research regarding these programs comes in the form of specific case studies. Himes (1993) studied the Fairfax (Virginia) Symphony Orchestra, though the purpose of the study is not entirely clear.

Himes (1993) surveyed fourth-grade students who attended chamber concerts for young audiences as well as their classroom teachers, general music teachers, and the performers of the concerts. The chamber concerts were attended by 7,300 fourth-grade students with 280 classroom teachers from 82 elementary schools. The goal was to administer the survey to 10% of these individuals. Eight schools were randomly selected and asked to participate. One school, however, declined, leaving a sample of fourth-grade

students from seven randomly selected schools. The surveys were hand-delivered to the schools and returned to Himes via the school district's internal mail system. The surveys were administered six weeks after attendance at the concert. This is problematic since it is difficult for adults to remember something that occurred six weeks prior and even more difficult for nine-year-old children. Himes acknowledges this and states that the delay was due to an error in survey administration.

The surveys explored students' experiences at the concert and how the concert influenced their knowledge of classical music. The return rate for the student surveys was 63%. The survey of general music teachers and the survey of classroom teachers had return rates of 57% and 67%, respectively. The surveys of teachers examined the educational value of the concert in terms of preparatory materials, the actual performance, follow-up materials, and student reactions. Lastly, the surveys of performers, which had a return rate of 71%, looked at the performer's views on the performance in terms of programming, educational value, progress, and change. Himes (1993) did not describe the design of the surveys or how they were validated.

Abeles (2004) examined the effect of school/orchestra partnerships on students' interest in instrumental music. The subjects ($N=653$) included fourth-grade students from three schools in different cities with established orchestral partnerships and fourth-grade students from three similar schools in the same cities without orchestral partnerships. In order to measure the students' interest in instrumental music, Cutietia's "Vocational Choice Scale" (VCS) was used. In this test, students chose icons that represented three careers that interested them. The VCS was slightly modified to eliminate sex stereotypes and to better represent the ethnic diversity found in the schools. To further assess the

reliability of the modified VCS, it was administered to two fourth-grade classrooms that were not involved in the study. It was administered to the same classrooms 29 days later and an average of 82% of the individual choices remained the same. Fifteen students who participated in instrumental music classes were interviewed individually to further examine the impact of the partnership program on instrumental music participation. Data were also collected from middle school-aged alumni who had participated in one of the partnerships as elementary school students to determine the long-term effects of participation in the program.

Abeles (2004) found statistically significant differences in vocational choices between students in partnership schools and their peers who were not involved in partnership programs. Using a Logistic Regression analysis, it was determined that students who were involved in a partnership program were more likely to choose a musical icon on the VCS. Participation in the partnership program influenced students' decisions to play an instrument. Ten of the fifteen students interviewed (67%) as well as 60% of alumni stated that their participation influenced their decision to play.

Overall, Abeles (2004) found that children in second to fourth grade were more likely to choose vocations that are familiar to them. Because students in partnership programs are exposed to music more than their non-partnership peers, they were more likely to want to be involved in instrumental music programs. Abeles did caution the reader, however, that the research presented was a field study and thus other extraneous variables were not controlled.

Music Educational Outreach Programs

Music outreach programs at schools or between schools are documented less often than other types of outreach. Few case studies and even fewer quantitative studies exist. Single (1991) designed and implemented an arts outreach/audience development program for concerts at The Ohio State University School of Music (OSU). Geared towards students in majors other than music, the program was developed to increase student awareness of live concerts at OSU, provide them with preparation for the concerts, and develop audiences (Single, 1991). Other goals included the establishment of a profile of concert patrons and to provide advanced undergraduate music education students with opportunities to develop oral communication and interpersonal skills.

Single (1991) gathered information regarding the role of arts in society and education, attendance at performing arts events, and audience development/outreach programs in order to get an overview of arts in American society. Next a researcher-designed “audience analysis survey” was used to compile a profile of concert patrons at 12 concerts and measure their receptivity to the idea of a pre-concert talk. From this information, an arts outreach/audience development program was designed and implemented for students on the OSU campus.

Single’s program (1991) consisted of a pre-concert talk, followed by the concert and a survey of reactions to the concert. Demographic information was also collected. The researcher recruited social, professional, or service organizations on the OSU campus to participate and offered them the choice of having the pre-concert talk during one of the groups’ regular meeting times or 45 minutes before the concert. Out of 85 social, professional, or service groups on the OSU campus, only three were willing and/or

able to participate. Classes with required concert attendance, such as music appreciation classes, were also invited to participate and pre-concert talks were given during their regular class times. The pre-concert talks were then given by undergraduate music education majors who were selected by the researcher and dissertation committee and then trained by the researcher.

The return rate of the surveys ranged from 38% to 71%, depending on the concert. The average return rate was 52%. Seventy-seven percent of respondents indicated that the pre-concert talk contributed to their enjoyment of the concert and 29% thought that they would not have enjoyed it as much without the talk. Eighty-three percent said that the talk contributed to their understanding (Single, 1991).

The majority of Single's (1991) findings are about the demographics of concert attendance. While this is useful information, it does not reveal why concert-goers attended (unless they were required to do so for class) or why or how their participation in the pre-concert talks helped their understanding. This sort of information would be most helpful in creating similar programs in other locations. Though not directly related to the current study, Single's research is relevant because it is one of the few studies that examined the impact of outreach on the community.

Approaching outreach from a different perspective, Plourde (2000) studied outreach programs that teach performers how to teach, using case studies of programs at University of Rochester's Eastman School of Music (ESM), Manhattan School of Music (MSM), and the New England Conservatory of Music (NEC). The study specifically investigated music schools as an environment for teaching performers how to perform for and work with children. The researcher chose the three schools based on their

similarities. ESM, MSM, and NEC are all nationally recognized urban schools of music that provide a conservatory environment for students. In addition, they all have well-developed programs that serve children in their communities.

Plourde (2000) visited both MSM and NEC to observe outreach activities and interview faculty, staff, and students about their experiences. Plourde also had extensive phone interviews with ESM faculty and alumni. Course descriptions, syllabi, and both published and unpublished articles were collected from all three schools. As data were gathered, the researcher focused on two broad categories of topics: (a) the goals, design, descriptions, college student involvement, and assessment of programs for children and (b) the goals, characteristics of kinds of training, descriptions of courses, faculty involvement, and assessment of training of college students.

Though the programs at ESM, MSM, and NEC all had similar goals, Plourde (2000) discovered that each program had developed its own personality. Through the “Eastman Initiatives,” ESM has made community involvement and responsibility a priority for the whole school. For example, all freshmen participated in a colloquium about community involvement, chamber music groups were required to have performances in the community, and every student was required to introduce and explain at least one piece on their senior recital. Students at ESM can also choose to focus on community outreach through the “Arts Leadership Program” and Plourde describes how a partnership with the Rochester City School District provided string classes and choral ensembles to local school children.

MSM, through its Educational ArtsReach department, provided curriculum guides to teachers at participating schools. The curriculum guides coordinated with orchestra,

jazz, and opera presentations by students and local freelance performers, which happened in the schools, though the I.D.E.A. sequence. Short for “Introductions, Discoveries, Encounters at MSM, and Applied Instruction,” the sequence began in the schools and gradually brought students into the MSM community (Plourde, 2000).

Lastly, NEC’s Learning-Through-Music program aimed to make music part of daily school life, rather than a special event. Specialists in the program were assigned to work with a classroom teacher to develop projects that fit with the class’ curriculum and the teachers’ areas of expertise. Plourde (2000) noted that these specialists were mostly faculty and professionals, but students at NEC were also involved and had the opportunity to take “music-in-education” courses or follow an “artist-teacher-scholar” framework designed to develop well-rounded musicians. NEC was the only school of the three actively gathering data about their programs. Plans were also underway for a charter school based on similar principles. Despite these differences, all three schools were found to include concerts for children, individual workshops for classes, enhanced school music programs, and courses/coaching/practical experiences for college students as part of their outreach programs.

During the interview process, Plourde (2000) asked everyone to name the most important skills for a performer to have in order to be effective working with and performing for children. All interviewees were also asked what recommendations they would have for anyone starting a similar program. Common responses to the first question included: (a) understanding the atmosphere of the school; (b) a knowledge of the basics about children and learning; (c) good organization and the ability to draw on outside resources; and (d) to have good communication skills, to be flexible, honest,

down-to-earth, empathetic to children, and enthusiastic. It was also determined that a successful program should: (a) involve the whole school, (b) begin on a small scale, and (c) have financial support/funding in place before beginning.

In general, these case studies went in depth and provided specific information regarding the programs that were studied. It is interesting to note, however, that ESM was the only school of the three to offer a music education major or a program leading to certification. MSM does not offer classes in music education. It would have been intriguing to observe the differences between the performance majors' and education majors' experiences in the ESM program.

Only one quantitative study has been found regarding outreach programs. Gregory (1995) surveyed music education professors across the country to examine: (a) the extent to which higher education institutions collaborated with K-12 schools for music teacher education; (b) the degree to which select components were present in these collaborations; (c) the perceived benefits and problems that occur as a result of collaboration; and (d) the differences, if any, in how the collaborations related to size, location, and/or type of higher education institution. The study involved 813 higher education institutions that prepare future music teachers (by offering a music education major) which were identified by cross-referencing Peterson's Guide to 4-year Colleges (1991), the 1990 National Association of Schools of Music directory, and the College Music Society's directory for the United States and Canada (1990-1992). From this population, a stratified random sample was taken. Each sampling frame was one of six regional National Association for Music Education (NAfME) divisions. Institutions within each frame were selected randomly, for a sampling rate of 25% ($n = 204$).

Gregory (1995) then sent surveys with cover letters and return envelopes to the highest ranking music education faculty member at each school. If no faculty member was identified, then the mailings were sent to the music Department Chair, Dean, or equivalent position. Sixty-six follow-up postcards were sent and 54 phone calls were made urging non-responders to return their surveys. For the six NAfME divisions, the return rate ranged from 67% to 83%. Overall, 155 surveys were returned, resulting in a return rate of 76%.

Gregory (1995) found that 97% of colleges/universities collaborate with K-12 schools; however the type of collaboration, extent to which they collaborate, and reasons for these partnerships vary. The most common reasons for collaboration were: (a) to observe and provide field experiences for students, (b) for student teaching, (c) to recruit college students, and (d) to provide assistance to K-12 programs. The least common reasons included to exchange personnel and for research. This question also provided an open-ended space for other reasons. The most common responses were: (a) music festivals/contests, (b) music assemblies, (c) guest speakers for music education courses, (d) joint concerts, (e) music camp, (f) private instruction, and (g) to serve as clinicians or guest conductors.

Gregory (1995) also found that communication between collegiate and school partners in collaborations/outreach programs was most often through informal contact, phone calls, and letters. Shared decision making is most frequently used for scheduling, student teaching expectations, evaluation, and deciding locations for field experiences. K-12 teachers tended to provide feedback on these decisions after they have been made, rather than being instrumental in the decisions (64.83%). In only 16% of the surveys did

higher education personnel report that the K-12 teachers had equal decision-making power to the college/university faculty.

The number of faculty members involved in collaborative efforts was as widely varied as the reasons for the collaboration. Ninety institutions had 1 to 12% of the faculty involved and only ten had 76 to 100%. Sources for financial resources varied widely as well. In 45% of surveys, Gregory (1995) found that the funding came from a budget designated for something other than collaboration. Approximately 33% reported that funding came directly from the faculty members and another 33% reported that their college/university had a specific collaboration budget. Surprisingly, 19% said that they had no costs in their collaborations, and 14% said that they received outside funding.

Perceived benefits, reported by more than 75% of responders, included: (a) better field experiences for college/university students, (b) graduates become more effective teachers, (c) higher education faculty are more aware of K-12 realities, (d) reduced isolation and elitism of the college/university, and (e) an improved music education curriculum. Gregory (1995) noted that the biggest problem, reported by 80%, was a lack of time in the schedules of faculty members.

Chi-square tests showed no significant differences between the regions of the United States. Statistically significant differences were found, however, between schools of varying sizes and programs. An analysis of variance (ANOVA) demonstrated statistically significant differences based on size ($p < .02$), number of music education majors ($p < .001$), and the presence of a graduate program ($p < .05$). Larger institutions were more likely to have more collaboration as were institutions with greater numbers of music education students and institutions with graduate students (Gregory, 1995).

Interestingly, the previously cited results for MSM and NEC do not fit with this finding, as they do not offer a music education major.

Besides being one of the few quantitative studies about outreach programs, Gregory (1995) also had one of the highest return rates for any study reviewed for this proposal. In planning future outreach programs, it would be interesting and helpful to measure the K-12 teachers' perceptions.

String Project Research

Byo and Cassidy (2005) examined the role of the String Project in teacher training and community music education. The purpose of their study was to evaluate the extent to which the String Projects encourage string education majors to become string teachers as well as the extent to which they stimulate the growth of new school orchestra programs. The subjects were project directors, master teachers, student teachers, community children, and parents at 13 String Projects in the 2003-2004 school year ($n = 1,458$).

Byo and Cassidy (2005) collected data with both written and oral survey instruments. Questions regarding characteristics of community children, attitudes of participants, structure of student teaching experience, and demographics were adapted from previous survey research. The measures were refined using advice from and consultation with a former president of ASTA, two music education colleagues with survey research expertise, and four doctoral music education students, two of whom had school-aged children.

Project directors and master teachers were interviewed by phone. These interviews ranged between 45 and 75 minutes. Directors answered questions about the background and structure of their String Project, the number of student teachers and

community children involved at their site, and information about their budgets. Master teachers provided information about their personal qualifications, the curriculum of their String Project, and the attitudes of student teachers (Byo & Cassidy, 2005).

Student teachers, community children, and parents were asked to complete survey instruments either during class/rehearsal or at home. Student teachers responded to questions about their professional goals, perceived values of and time spent in String Project activities, as well as the extent and quality of work done by master teachers. Byo and Cassidy (2005) surveyed community children about their participation in the String Project, their academic achievement, and their commitment to music study. Parents were asked similar questions about their children's academic achievement and commitment to music performance as well as questions about the value of their experiences with the String Project. Parents were also asked to read the survey questions to their children who were unable to read the questions on their own.

Response rates varied by group. The directors had the highest response rate at 100% and the community children had the lowest rate at 53.2%. The parents, the student teachers, and the master teachers had response rates of 58.3%, 66.6%, and 88%, respectively. Though Byo and Cassidy (2005) do not provide an overall response rate, the lowest rate provided is moderate and the rest range from moderately highly to excellent response rates. It is safe to assume that the findings from this study can be generalized and applied to other populations of String Project participants, but only to other String Project populations. Generalization elsewhere, including to students and teachers who are not involved in the String Projects, would be inappropriate.

Byo and Cassidy (2005) collected data regarding the demographics of the String Project directors, master teachers, student teachers, children, and parents. Data were also collected concerning the development of string music educators, student teaching experiences and supervision, as well as characteristics of community children. However, the measures of the attitudes toward the String Project are most relevant to the current study.

Byo and Cassidy (2005) asked student teachers to rate 14 different aspects of the String Project on a 4-point Likert-type scale. This scale ranged from “Very Valuable” to “Not Valuable.” Teaching in small groups and one-on-one, interactions with pupils, peers, and parents, and feedback from and discussion of teaching techniques were thought to be the most valuable, with 83-97% of the student teachers rating them “Valuable” or “Very Valuable.” Despite positive comments from the student teachers, master teachers’ perceptions of student teacher attitudes varied widely. Seven master teachers said that their student teachers had positive attitudes, five said that their student teachers had variable (both positive and negative) attitudes, and one said that their student teachers had negative attitudes (Byo & Cassidy, 2005).

Byo and Cassidy (2005) also found extremely positive attitudes among the community children and parents. In their research, 86% of community children said that they loved or liked the String Project and 93% said that they would recommend it to a friend. Additionally, 86% of the community children responded that they intended to participate in the String Project again in 2004-2005. The response was even more positive from the parents, with 99% reporting that they had a positive attitude about music instruction and would recommend the String Project to other parents. However, only 24%

of parents responded that their children participated in school string programs and cited various reasons for this lack of participation, including lack of availability of school programs. Seven of the String Project directors indicated that the String Project filled a void where there were not school programs.

In fact, only five directors stated that the String Project functioned as a supplement to the public school programs. Byo and Cassidy (2005) do not address this in their discussion, however, focusing mainly on the study's implications for student teachers and therefore its implications for the future of string music education. This unfortunately leaves out the perceptions and opinions of the K-12 public school string teachers, who no doubt provide an important part of a young string student's education.

Ferguson (2003) and Schmidt (2005) both studied preservice teachers within the String Project setting at Arizona State University. Schmidt focused on lesson planning procedures while Ferguson explored the relationship between preservice teachers' teaching experience and their perceptions of themselves as teachers.

Ferguson (2003) gathered qualitative data using interviews and observations during the first semester of operation of the String Project. Ferguson chose to develop a "multiple case study using an ethnographic approach to data collection and analysis" (p. 40) because she felt that the lenses of the participants were vital to her research.

The primary participants of Ferguson's (2003) study were four undergraduate students who worked as teaching assistants in the String Project during the spring semester of 2002. These students' responsibilities in the String Project included teaching small-group lessons, assisting the lead teacher, and attending faculty meetings. Other

participants of the study included the String Project Director, Lead Teacher, and students enrolled in the String Project classes.

To collect data, Ferguson (2003) attended the orientation meeting and “almost all” (p. 40) classes and faculty meetings during the String Project’s 12-week instructional period. She also observed “approximately 12 small-group lessons, distributed evenly among the four primary study participants.” (p. 40) During larger classes, field notes were taken from an unobtrusive location, while in smaller settings Ferguson did not take notes so as not to distract the participants. Whenever possible, field notes were transcribed directly after classes and reflective and interpretative comments were added.

Data was also collected through structured and unstructured interviews with primary and secondary participants, including taped oral interviews, email correspondence and informal conversations. Both the lead teacher and undergraduate students were emailed every other week asking for responses to their experiences in the program and three of the undergraduate students each participated in two structured, taped interviews. Taped interviews were transcribed verbatim and reflective comments were added. The undergraduates were also questioned informally about their teaching experience and this information was added to Ferguson’s (2003) field notes. The Project Director also recorded her thoughts about the String Project’s development and answered researcher questions via email.

Ferguson (2003) collected artifacts related to the String Project that included emails and letters between university administration, faculty, and representatives from the American String Teachers Association as well as between the Project Director and parents, teachers and other community members. Articles, administrative documents, and

class materials including music, student artwork, and final concert programs were also collected.

Raw data were organized from field notes, interviews, emails, and documents. Each piece of data was labeled with dates and page numbers before being filed chronologically. Ferguson (2003) also kept a log of data sources that included dates, location, and activities. Graduate students in a qualitative research class and one professor provided peer reviews, and study participants reviewed interview transcripts and verbally confirmed researcher recollection of events.

Several themes emerged from Ferguson's (2003) data analysis, most notably that the undergraduate students' existing perceptions filtered their experience and influenced their reactions to teaching and learning situations. The undergraduate students also had individualized perceptions of themselves as teachers and expressed different views based on these perceptions. These individual perceptions also influenced the students' responses to feedback, including feedback from young students, though all agreed that the feedback they received was valuable. Lastly, the undergraduates valued the authenticity of teaching in the String Project.

Schmidt (2005) also studied preservice teachers at the University of Arizona String Project. The year-long study focused on freshman and sophomore music majors' understanding of lesson planning and took place during the String Project's second year. The subjects were ten students, seven of whom were hired as String Project teachers during the first semester and three of whom were added during the second semester.

Data was collected by way of observation notes, interview transcripts, and written lesson plans. Each participant was observed teaching at least two private lessons each

semester, and Schmidt (2005) made field notes and audio recordings of each lesson as well as recordings of discussions with each participant after the observation. Group classes were observed approximately every two weeks and also were recorded as were String Project faculty meetings. Pertinent sections of the recordings were transcribed verbatim, and a case record was created for each teacher.

Schmidt (2005) identified five themes through data analysis: “(a) concerns about knowing how to begin to plan, (b) difficulty identifying what the children needed to learn, (c) the prominence of decisions made ‘on the fly,’ (d) comparisons of their thinking about teaching and planning with actual written plans, and (e) limited transfer of in-class experiences to their teaching in the Project.” (p. 10-11). The study, however, did not turn out as Schmidt expected because the majority of the teachers neglected to write formal lesson plans.

Schmidt’s (2005) interpretation of the data suggests that the preservice teachers’ lesson planning was limited by their content and pedagogical knowledge and therefore her expectations of fluency of teaching were unrealistic. The researcher was surprised that the preservice teachers did not have the lesson planning skills that were expected, even after a year. This suggests that early and extensive supervised field experiences may be even more crucial than previously thought.

The preservice teachers’ approaches to planning also seemed to be reflective of their own learning styles (Schmidt, 2005). The teachers who did keep written plans seemed to be those who preferred structured, linear thinking. “Those with a more random-abstract dominant learning style, or who were less organized in general, did not

voluntarily write much.” (p. 20) It also seemed that the preservice teachers did not transfer learning from techniques classes into practical teaching experience.

Davis (2011) carried out a case study at the University of South Carolina String Project with the purpose of obtaining an in depth understanding of the experience of all String Project participants, including university undergraduate students, community members, faculty, and the institution itself. Other research objectives of this qualitative study included documenting the benefits as well as the challenges for all participants.

After a preliminary visit, Davis (2011) began fieldwork by collecting data from multiple, varied sources during the fall semester of 2009 until the fall semester of 2010. Most of the data was collected during eleven visits to the University of South Carolina campus, though some information was exchanged via email or telephone. Over the course of the study, 37 participants, ranging from teenaged String Project students to the Dean of the University of South Carolina School of Music, agreed to participate. While the sample of participants was entirely self-selected, the researcher made efforts to recruit and include participants that offered varied perceptions.

In addition to field notes, Davis (2011) also collected archival documents from the current and former String Project directors including String Project handbooks, previous community surveys, and publicity brochures. Pictures and videos were taken of performances, and three undergraduate students provided journaling of their String Project experience. The 60 hours of participant observation were then followed by personal reflection from the researcher.

Thirty-three participants gave interviews of varying lengths that were transcribed for analysis. Interviewees included current and former directors, the Dean of the School

of Music, graduate assistants, and a sample of university student teachers, adult String Project students, teenage String Project students, and parents and/or relatives of String Project students, including one parent of a former String Project student. While Davis (2011) refers to public school string teachers as part of the extended String Project community, no public or private school teachers are represented in the list of interviewees, nor are they represented in any of the other data collected.

Davis (2011) completed data analysis concurrently with data collection, and data were coded into categories both manually and with the aid of computer software. This coding resulted in 137 codes with 1,485 occurrences. Strategies to increase validity included prolonged time in the field, multiple data sources, peer review by professors and cohort members, verification by participants, and the creation of an audit trail.

As a result of experience with the String Project, Davis (2011) found that the undergraduate students developed strong identities as teachers as well as mentor-mentee relationships with not only university faculty members, but also with their peers. Additionally, undergraduate students were forced to learn how to juggle the demands of their academic, musical, and teaching responsibilities. The community partners expressed their excitement at the affordable opportunity to learn and make music as well as at the mental challenge and enjoyment that music making provides. Lastly, the faculty and university personnel reported that the String Project helped fulfill their responsibility to the university's mission, provided a framework to help preservice teachers become effective, prepared professionals, and served as a way to help community members find and make music.

Because of the breadth of Davis' (2011) study, this review will focus on the experiences of the participants mostly closely related to the current study – the “community partners.” The “community partners” include the String Project students and their families, school teachers, and other people who attend String Project concerts or provide support. The experiences of these participants are discussed in Chapter 6 of Davis's dissertation. However, only String Project students and their families are substantially represented. Davis mentions the support of the area school string teachers in allowing recruitment events and hosting student-teachers, but chooses to focus on community partners who take part in the String Project on a weekly basis. Davis does acknowledge that it would be interesting to study the perceptions of these more distant participants in the future.

The only discussion of school teachers' experience in the entire document occurs when Davis (2011) discusses repertoire selection by String Project:

The selection of a new method book came up in conversation with several faculty members and undergraduate teachers over the course of my time at the String Project. For many years, the USCSP had used a highly regarded method book considered effective and practical by USCSP teachers and the community.

However, the method book was also very popular with Columbia public school string teachers. The USCSP faculty decided to cease using the method book because they did not want to impinge on the public school curriculum (p. 194-195).

While the status of string programs around the country has been studied (Gillespie & Hamann, 1998; Hamann, Gillespie, & Bergonzi, 2002), generalizations are difficult

due to low response rates and varying methodologies. Little research has been done regarding string-specific musical outreach programs, such as the National String Project Consortium's String Projects. The majority of the quantitative research that does exist focuses on programs with symphonic orchestras (Abeles, 2004; Himes, 1993), despite the fact that colleges and universities also provide relatively comprehensive programs (Undercofler, 1997).

Single (1991) and Plourde (2000) both examined outreach activities at specific institutions of higher education, but the scope of both studies was so limited that it is difficult to generalize their findings to different situations. Gregory (1992), however, surveyed the deans of collegiate music schools to determine the extent of their outreach activities. While he found many trends in communication and budgeting as well as the perceived benefits for the university, Gregory's study did not examine the K-12 teachers' perceptions of musical outreach programs. Similarly, Byo and Cassidy (2005) not only used a self-contained population for their study but also failed to examine the NSPC's String Projects from the perspective of K-12 teachers.

The String Project research that has been conducted has mostly focused on the preservice teachers (Ferguson, 2003; Schmidt, 2005) and the one broad study (Davis, 2011) did not really include K-12 teachers or other groups that the researcher felt were in the periphery of the scope of the String Project. Additionally, with the exception of Byo and Cassidy (2005), no quantitative String Project research has been found. In all research found regarding musical outreach, the examination of K-12 teachers' perceptions has been neglected.

Chapter III

Methodology

Participants

The target participants in this study were 53 K-12 string teachers who taught at a public, private, or charter school within a 10-mile radius of the String Project at Wayne State University in Detroit, Michigan. The participants were also listed as string teachers on their school websites and verified by school office personnel. (see Appendix C)

Instrumentation

The Measure of String Project Perceptions in Detroit (MSPPD) (see Appendix A) is based on the measure used by Gregory (1992). In his study, content validity was established through examination of the items by a panel of experts. Drawn from expert university faculty in various regions of the United States, the panel suggested revisions, which were implemented before the survey was pilot-tested. Gregory's survey, originally designed for university faculty, was modified for use with K-12 string teachers for the current study. The MSPPD was evaluated by graduate music education majors at Indiana University and music teachers in Spokane, Washington for validity and then pilot-tested with the K-12 string teachers in the school districts surrounding the Central Washington University String Project.

The MSPPD measured the perceived benefits and problems for the students involved in the String Projects and the relationship between the String Project and K-12 school string programs. The MSPPD also collected basic demographic information to determine what percentage of K-12 string students utilized the resources available in the

String Project and if there were any defining characteristics for those students who did so (see Appendix A).

Procedure

The MSPPD was created during spring semester 2006 and updated during summer 2011. After being evaluated by graduate string students in music education at Indiana University and music teachers in the Spokane Public Schools (Spokane, Washington), it was pilot-tested with the string teachers in Ellensburg, Washington, the site of the String Project at Central Washington University. No adaptations were made based on this pilot test.

For the main study, the MSPPD was sent via email or United States Postal Service (USPS) to 53 K-12 string teachers at 77 schools within a 10-mile radius of Wayne State University. If a teacher did not have an email address available, a paper copy along with a return envelope was sent to the school's mailing address. Each school district that was surveyed was emailed a link to a unique survey instrument. The survey instruments were identical, but the data was collected in separate databases. This helped assure the K-12 string teachers' confidentiality but still allowed the researcher to obtain socio-economic data about the district without asking the participants to take the time to report this data.

In early March 2012, a cover letter and link to the MSPPD was sent via email to 40 K-12 string teachers and USPS to 13 K-12 string teachers in the 77 selected schools (see Appendix C). After one week, during mid-March, if there had been no response, a revised cover letter and link to the MSPPD was sent. After one more week a third link to

the MSPPD, along with a newly revised cover letter was sent to those who had not responded.

After the initial letter was sent, one email was returned as non-existent. Upon further investigation by the researcher it was determined that the school website had not been updated in the past year and that the school no longer offered a strings or orchestra program. This changed the number of subjects to 52. After the second mailing, two more potential participants responded that they were no longer string teachers, lowering the number of possible participants to 50. After the final mailing, five more schools responded that they no longer offered string instruction, lowering the number of potential participants to 45 K-12 string teachers.

In order to assure confidentiality of all participants, demographic and school district information was obtained by the researcher using the United States Department of Education website. Distance in miles from the nearest String Project was also calculated by the researcher using Google Maps. This was recorded on an Additional Information Sheet for Returned Surveys (Appendix B). Responses to section two of the measure were scored numerically using a five-point scale (Strongly Agree = 5, Strongly Disagree = 1). To minimize response set, some of the items on the measure were negatively stated and scoring was reversed for negatively stated questions (Strongly Agree = 1, Strongly Disagree = 5).

Descriptive statistics were computed for all items in section one of the MSPPD using SPSS 20 for Mac OS X. Section two of the MSPPD was treated as a single variable with multiple items, and descriptive statistics were computed for each of the Likert-type items.

The follow-up questions in section three were analyzed qualitatively using content analysis. Data was sorted and coded for emergent themes. After themes were identified, statements were tallied within each theme to determine the frequency of that theme. This data, as well as the follow-up data, was also analyzed by an outside source to confirm validity of themes and reliability of coding. All themes were confirmed, and the coding was found to be reliable.

Due to a much lower response rate than anticipated or desired, the decision was made to ask half of the respondents to answer to two additional follow-up questions about student participation and communication, based on the data obtained from the original survey (Appendix D). Four respondents were emailed and asked to consider answering the follow-up questions by email or phone. Two of these teachers had indicated that they did have students enrolled in the String Project, and two indicated that they did not. The teachers who did not have students enrolled in the String Project were selected because their schools had similar demographics to the two that did have students enrolled.

These questions were also sent to the director of the String Project based on the assumption that she might be able to offer valuable insight into who enrolls in String Project classes and why. At the advice of the Institutional Review Board (IRB), only one request to participate in additional questions was made. The IRB felt that the researcher had contacted the potential participants enough times and should not keep asking them to participate.

Chapter IV

Results

Survey Responses

Eight surveys were returned for a response rate of 17%. While the response rate is much lower than desired, the results still provide some useful information about K-12 String Teachers' perceptions of the String Project at Wayne. However, due to the low response rate, the results should be interpreted with caution.

One teacher, who did have students enrolled in the String Project, along with the String Project director, responded to the additional request and answered the two follow-up questions. This teacher response represents a single opinion and therefore is in no way generalizable to other public or charter school string teachers in the Detroit area. Similarly, because of the low response rate, it is impossible to generalize the responses from the Measure of String Project Perceptions in Detroit (MSPPD) to the entire population of K-12 String Teachers in the Detroit area.

Demographics of Detroit Area K-12 Schools.

Using the Department of Education website and www.city-data.com, the researcher gathered demographic information for all identified schools in the Detroit area. Demographic data included number of students, predominant races of students, Title I status, and percent free/reduced lunch as well as the median income (by zip code) for 2004 and 2010 and estimated home values for 2010.

Because a distinction is seen between Detroit Public Schools, private/charter schools, and suburban school districts, the data is presented separately for each of these types of schools. The socio-economic characteristics that are seen in suburban districts

with string programs are not necessarily present in the Detroit Public Schools that offer string programs; nor are they necessarily present in Private or Charter schools, regardless of location. Data for suburban public school districts is presented in Table 1.

Table 1

Comparison of Possible Predictors of String Programs in Suburban School Districts

School District	Str.	%F/R	Title	Race	2010 income	Home value
Grosse Pointe	Y	1.2-42	N	W	83,871	252,148
Berkley	Y	2.6-32	Y	W	52,017	131,716
Royal Oak	Y	26-33	Y	W	69,632	181,092
Southfield	Y	47-63	Y	B	51,967	127,811
Ecorse	Y	50-63	Y	B	30,987	71,925
Dearborn	Y	76-92	Y	W	32,330	108,607
Ferndale	N	33-73	Y	B	49,441	120,979
Lamphere	N	34-74	Y	W	49,000	128,779
Warren	N	39-53	Y	W	48,201	128,186
East Detroit	N	43-66	Y	B/W	45,385	90,461
Center Line	N	47-59	Y	W	39,471	88,947
Oak Park	N	58-74	Y	B	52,017	131,716
Highland Park	N	59-75	Y	B	28,563	81,725
Hazel Park	N	59-87	Y	W	37,738	85,137
Madison	N	60-83	Y	W	49,000	128,779
Melvindale/N. Allen Park	N	62-73	Y	W	41,206	95,712
Harper Woods	N	64-69	Y	B/H	49,932	106,775
Van Dyke	N	65-90	Y	B/W	41,881	88,947
Fitzgerald	N	66-83	Y	B/W	39,471	85,699
Hamtramck	N	76-90	Y	W/A	25,273	54,163
River Rouge	N	87-88	Y	B	33,043	71,002

Note. Str.= district offers string instruction; %F/R = range of percentage free and reduced lunch at all district schools; Title = >50% Title I schools in district; Race = predominant race(s) in district; 2010 income = median household income for 2010 by district zip code; Home value = median home value for 2010 by district zip code; Y = yes; N = no; W = white; H = Hispanic; B = black; A = Asian.

An analysis of the data in Table 1 indicates that, in suburban public school districts, the string programs are more frequently found in higher income, predominantly

white areas with home values above \$100,000. However, income, race, and home value alone or in combination, do not seem to be related to whether or not a district offers string instruction.

Differences in home value, income, and percent free and reduced lunch between districts with string programs and those without were tested with Mann-Whitney U. No significant differences were found ($p > .05$), however, there are some trends that are worthy of discussion.

While schools with and without string programs did not differ significantly in percent free and reduced lunch, $U(20) = 24.0$, $Z = -1.63$, n.s., or income, $U(20) = 27.5$, $Z = -1.36$, n.s., the differences between average home values, $U(20) = 22.5$, $Z = -1.75$, $p = .08$, approached significance. Additionally, the differences between the mean rank for home value of districts with strings (14.75) were much higher than the mean rank for districts without strings (9.50). Large differences in mean ranks were also seen with percent free and reduced lunch and income. Overall, since a small number of districts with string programs were compared to a much larger number of districts without programs, a larger scale study is probably necessary to determine if there really are school district-level differences among programs with and without strings.

Of over 100 urban and suburban private and charter schools, 19 were identified to have string programs. All 19 had predominantly or exclusively black students and all but one ($n = 18$) either had more than 700 students enrolled or were part of a charter school district of two or more individual schools that encompassed more than 700 students. There are, however, many private and charter schools with more than 700 students that do not offer strings. The researcher did not feel that home values or median incomes for a

given school's zip code were relevant to private and charter schools because they do not necessarily enroll students from the surrounding neighborhood.

Within the Detroit Public Schools, things are significantly more complicated. Because of the immense size of the district and lack of curricular alignment between primary, intermediate, and secondary schools, the data below is discussed at the school level, rather than district level. Of 147 schools, 15 offer some sort of string program. Ten of these are elementary schools or K-8 schools, and five are high schools. No free-standing middle schools (grades 6-8) offer string instruction.

There are no defining characteristics of the schools that offer string instruction when compared to the schools that do not. (See appendix E). In three instances, there are two schools in the same neighborhood that offer string instruction, but feeder schools to the high schools with string instruction do not necessarily offer strings, nor do elementary schools with string instruction necessarily feed into middle or high schools with strings. Income and home value did not seem to influence string instruction either. The school located in the area with the highest income and home value did not offer strings, yet several in the poorest areas did.

To further complicate things, many, but not all, Detroit Public Schools offer open enrollment. While some of these schools are still primarily neighborhood schools, they also accept applications from children who do not live in the neighborhood. Many of these schools also market themselves as hosting a specific program or emphasis, but are not considered to be magnet schools because of the neighborhood enrollment. Because of this complex system, it is difficult to know how many students who attend a given school are really residents of the surrounding neighborhood.

Differences in income, home value and percent free and reduced lunch between Detroit Public Schools with strings and without strings were tested using Mann-Whitney U. No significant differences were found ($p > .05$) for income, $U(20) = 860.0$, $Z = -.11$, n.s., or for home value, $U(20) = 690.0$, $Z = -1.27$, n.s. However, a significant difference was found for the percentage of students who have free or reduced lunch, $U(20) = 557.5$, $Z = -1.95$, $p = .05$. The Detroit Public Schools that offer strings have a significantly lower percentage of students who receive free or reduced lunch than those that do not offer strings.

When considering the data above, it is important to note that the Department of Education (DOE) racial statistics do not take into account the large Middle Eastern population in the Detroit area. We do not know how many of the students represented in either the suburbs or Detroit itself identify as Middle Eastern. Nor does the DOE take into account students who consider themselves to be part of two or more races. It would be interesting to look at string programs through these lenses as well.

Demographics of Student Participants vs. Non-Participants.

Of the teachers surveyed, very few had students who participated in String Project activities. Less than .8% ($n = 8$) of all students in string classes identified by the K-12 teachers ($n = 1,006$) were also enrolled in String Project classes. Only two middle school students and six elementary school students were identified as dually enrolled in the String Project and their school program. Even at the school with the largest number of dual enrolled students, there were still less than 50% of the students who also participate in the String Project. One teacher from an urban charter school offered the following insight:

At my school, all students take strings and choir in the 3rd and 4th grade. In 5th grade they choose between the two subjects and generally stick with that choice the remainder of their time here. When they choose to participate in the String Project they have already had two or three years of experience with the instrument and already know they like it enough to want to commit to participating in a more intense experience like the String Project. Most Detroit schools do not have string programs and so they don't have enough experience with the instrument to know whether they want to drive downtown twice a week and pay money to study the instrument further. For middle class parents, signing up for something like the String Project may not be viewed as a big commitment, because transportation and funds are readily available, but for low-income students it is a sign of significant interest since those things are not as easy to come by.

The String Project director identified one additional student who was dually enrolled in the String Project and their school program. The director added:

So far we haven't had a significant population of dual-enrolled students. Since most of the children in the city and inner-ring suburbs have no access to string instruction (especially for the 3rd-5th graders we accept as beginners), we have been able to fill our enrollment mainly with those kids. We would like to recruit more 5th-8th graders, with a couple of years of prior training, to join our Level III Preparatory Orchestra, so hopefully in the coming years we'll have more dual-enrolled students. Off-hand I can only think of one local teacher I know for sure has an orchestra student participating in String Project. (L. Roelofs, personal communication, April 22, 2012).

Though 10 of the 68 elementary/K-8 schools in the Detroit Public Schools offer string instruction, Spain Elementary Middle School in Detroit is the only elementary school within the Detroit Public Schools that currently has a student dually enrolled in the String Project and their school program (Roelofs, personal communication, April 22, 2012). When looking at all Detroit Public Schools elementary schools, the obvious distinguishing characteristic of Spain Elementary Middle School is its proximity in miles to the String Project. It is nearly 3 miles closer to Wayne State than any of the other elementary schools that offer string instruction. (See Table 2) For a family with little to no access to transportation, this could be a significant factor. While one of the charter schools with dually enrolled students is also closely located to Wayne State (2.1 miles), the other is 9.8 miles away, much further than many of the other Detroit Public Schools.

Table 2

Detroit City Elementary and K-8 Schools With Strings

School	SP	#Stu	%F/R	Race	2010 Income	Home Value	Mi.
Spain	Y	831	76.2	B	19,903	150,062	2.6
Clemente Academy	N	796	93.4	H	26,937	63,193	8.6
Maybury	N	614	97.5	H	26,937	63,193	7.2
Logan	N	587	76.1	B	24,071	54,237	5.3
School of Arts East	N	603	81.2	B	23,972	53,925	5.8
Ludington	N	648	56.7	B	40,939	85,761	12.3
Bates	N	855	34.9	B	37,887	109,391	9.7
MacDowell	N	400	79.5	B	37,887	109,391	11.1
Edison	N	339	84.3	B	30,574	71,579	11.1
King Academy	N	867	87.0	B	30,574	71,579	8.5

Note. SP = students also enrolled in String Project; %F/R = percentage free and reduced lunch;; Race = predominant race at; 2010 income = median household income for 2010 by district zip code; Home value = median home value for 2010 by district zip code; Y = yes; N = no; H = hispanic; B = black; Mi = distance in miles to String Project.

Spain Elementary-Middle School, however, is one of the Detroit Public Schools that offers open enrollment, so it is impossible to know if distance is really a factor for the identified student. They may or may not live in within the neighborhood boundaries. Three other elementary schools with strings are also schools of choice: Ludington, Bates and the School of Arts East. Spain Elementary-Middle School also markets itself as a school with an Arts focus, which may potentially be another distinguishing factor (Detroit Public Schools, 2012).

Demographics of K-12 Sting Teachers and Programs

In order to answer research question 1, descriptive statistics were gathered for the K-12 String teachers including type of school, level taught, and number of students enrolled in their program. Of the respondents, 50% ($n = 4$) taught in urban charter schools and 50% ($n = 4$) taught in public schools. There were no respondents from private schools. Of the public school teachers, 50% ($n = 2$) taught in districts located in urban Detroit and 50% ($n = 2$) taught in districts located in suburban Detroit. Table 3 below breaks the response rate down by types of school.

Table 3

Survey Responses by Type of School

Type of School	Total # Teachers	# Response	% Response
Urban Public	11	2	18%
Suburban Public	20	2	10%
Urban Charter	8	4	50%
Suburban Charter	1	0	0%
Urban Private	2	0	0%
Suburban Private	3	0	0%

Note. Total # Teachers = total number of K-12 string teachers identified, # response = number of teachers who responded to survey, % Response = percent of teachers who responded to survey.

Most respondents, or 75% ($n = 6$) taught exclusively elementary strings. One teacher (12%) taught exclusively middle school strings and one teacher (12%) taught at both the middle school and elementary school levels. There were no respondents who taught high school strings.

The results of the survey indicated that, as a whole, respondents taught in a wide variety of classroom settings, ranging from elementary pullout programs outside of the school day to middle school orchestras. Three teachers (37%) taught only elementary strings in a “pull-out” program. One (12%) teacher taught only elementary strings in a non “pull-out” program. Two teachers (25%) taught both non “pull-out” elementary strings and elementary orchestra. One (12%) teacher taught only middle school string orchestra, and one (12%) taught non “pull-out” elementary strings and middle school orchestra.

The number of students that the teachers taught varied widely as well. Teachers taught as few as eight or as many as 500 string students each week. Of the teachers, one taught fewer than 10 students a week, and one taught 500 students a week. The rest of the teachers ($n = 6$) taught somewhere between 10 and 200 students per week. (See Table 4.) This resulted in 1,006 students receiving string instruction from the respondents, with 5.7% ($n = 58$) in middle school and the rest in elementary school.

Table 4

Respondents' Number of Students and Types of Schools

Respondent	School Type	Program Type	#Students
1	Suburban Public	MS Orch	50
2	Urban Charter	Non-pull	50
		El Orch	50
3	Urban Charter	Non-pull	12
		MS Orch	8
4	Urban Public	Pull-out	49
5	Urban Public	Pull-out	49
6	Suburban Public	Pull-out	8
7	Urban Charter	Non-pull	500
		El Orch	30
8	Urban Charter	Non-pull	200

Note. #Students = number of students enrolled in class, MS Orch = Middle School Orchestra, Non-pull = Elementary non-pull-out program, El Orch = Elementary Orchestra, Pull-out = Elementary pull-out program.

Descriptive statistics were also gathered to answer research question 4. Of the 1,006 students represented by the respondents, less than .8% ($n=8$) also attend classes at the String Project at Wayne. One hundred percent ($n=8$) of the students who also attended the String Project attended one of two urban charter schools. Six were elementary students from one school, and two were middle school students from the other school. While the results do need to be interpreted with caution, this indicates that there are a considerable number of students in the Detroit area who do not participate in String Project classes. While a larger percentage of middle school students (3%) than elementary school students (.6%) attended the String Project classes, it is difficult to come to a conclusion regarding attendance by grade level based on the low response rate.

Responses From Likert Items

The Likert-type items in Section Two of the MSPPD were designed to answer research question two. However, several teachers ($n = 3$) who did not have students

enrolled in the String Project selected “undecided” as their response to all questions in section two. Additionally, one teacher only answered the demographic information and “Strongly Agree” to question number 14, indicating that the String Project was not accessible to many of that teacher’s students. This teacher’s responses are not included in the data discussed below. Due to the small sample size and number of K-12 teachers whose responses to this section of the survey are included for analysis ($n = 7$), correlations were not computed and all data was analyzed descriptively.

Responses varied widely between K-12 teachers. Though the teachers with students enrolled in the String Project frequently had similar answers, this was not always the case. The same is true for teachers who did not have students enrolled in the String Project. The data is summarized in Table 5. Even though the numbers are quite small, participants with students enrolled in the String Project had generally positive responses.

Table 5

Number of Respondents by Question (n = 7)

Likert Question	Respondents with SP Students					Respondents without SP Students				
	#SA	#A	#U	#D	#SD	#SA	#A	#U	#D	#SD
1. I feel that my students who are involved in the String Project learn more quickly than my students who are not.	1	0	0	1	0	0	0	4	1	0
2. My students in the String Project learn different skills/techniques than I would teach them in class.	1	1	0	0	0	0	1	4	0	0
3. I believe that students who are involved in the String Project are more enthusiastic about string playing than those who are not.	1	0	1	0	0	0	0	4	0	1
4. My community is more supportive of music in general because of the String Project.	1	0	1	0	0	0	0	4	0	1
5. I think that my students who are involved in the String Project have a better overall musical experience than my students who are not.	1	0	1	0	0	0	0	4	0	1
6. I believe that the String Project has had a positive impact on my community.	2	0	0	0	0	0	1	4	0	0

Table 5 (continued)

Likert Question	<u>Respondents with SP Students</u>					<u>Respondents without SP Students</u>				
	#SA	#A	#U	#D	#SD	#SA	#A	#U	#D	#SD
7. I think that my students who are involved in the String Project have more technical skills than my students that are not.	1	0	0	1	0	0	0	4	0	1
8. I feel like there is a lack of communication between my program and the String Project.	0	1	0	1	0	2	0	3	0	0
9. I believe that collaboration with the String Project has helped my program.	2	0	0	0	0	0	0	4	0	1
10. I feel that my students who are NOT involved in the String Project are put at a disadvantage.	0	1	0	0	1	0	0	4	1	0
11. The presence of the String Project in my community has helped with growth of string programs in the area.	0	1	1	0	0	0	0	4	1	0
12. I have had to restructure my program because of involvement with the String Project.	0	0	0	1	1	0	0	4	0	1
13. I feel that the String Project has had a negative impact on my program.	0	0	0	1	1	0	0	4	0	1

Table 5 (continued)

Likert Question	<u>Respondents with SP Students</u>					<u>Respondents without SP Students</u>				
	#SA	#A	#U	#D	#SD	#SA	#A	#U	#D	#SD
14. I think that the String Project is NOT accessible to many of my students.	1	0	0	0	0	1	0	3	0	1
15. My community is more aware of my program because of the involvement with the String Project.	0	2	0	0	0	0	0	4	0	1
16. I think my program has improved since the inception of the String Project at Wayne.	1	1	0	0	0	0	0	4	0	1
17. It is difficult to have String Project students and non-String Project students in one class.	0	1	0	0	1	0	0	4	0	1
18. My school system has provided more funds for music education since collaboration with the String Project.	0	0	0	1	1	0	0	4	0	1
19. I feel like my community is more involved in my program since collaboration with the String Project.	0	2	0	0	0	0	0	4	0	1

Note. SP = String Project, #SA = number who responded Strongly Agree, #A = number who responded Agree, #U = number who responded Undecided, #D = number who responded Disagree, #SD = number who responded Strongly Disagree, Y = teacher who responded does have students enrolled in the String Project, N = teacher who responded does not have students enrolled in the String Project.

Qualitative Data

The MSPPD ended with four open-ended questions about the impact of the String Project at Wayne on Detroit area programs and the community. All comments, which ranged from two words to a paragraph, were entered into a word document and color coded to allow themes to emerge. The numbers of individual statements were then tallied to record the number of recurrences of each theme. These are listed from most to least frequent in Table 6. Table 6 also indicates the question number in which the responses were found.

Table 6

Occurrences of Themes From Qualitative Data

Theme	#	?(s)
1. Lack of Visibility in the Community	9	1, 3
2. Accessibility of String Project for K-12 Students	3	2, 4
3. Quality of K-12 Student Learning at String Project	3	1, 2, 4
4. Value of String Project Experience for K-12 Students	3	4
5. Student Exposure to String Playing Outside School	2	1, 4
6. Growth of New Programs in the Detroit area	1	2

Note. # = number of times theme occurred in responses in original survey, ?(s) = questions in which responses occurred.

The first theme shows the lack of visibility of the String Project at Wayne in the Detroit area. Many of these statements were two to three word comments in response to the question “How is the String Project at Wayne visible in your school community?” One respondent commented, “I never heard of the program until I received this survey.” Closely related to theme one, theme two discusses the accessibility of the String Project to the respondent’s students. Teachers reported that more students had access than they

had in past years, and that it was a way for students to continue playing if they move to a school that does not offer string instruction, but that the String Project did not reach out to all schools in the Detroit area.

Theme 3 deals with student learning and had mixed responses from the participants. One middle school teacher commented, “Students play much better when they get involved in the String Project. Their posture, vibrato, sight-reading, technique, and tone have all improved dramatically,” while an elementary teacher wrote, “I am concerned with some of the techniques the students pick up. At the younger ages, every concept they learn must be correct because the habits are hard to break if they are not.”

Themes 4 and 5 were also closely related, discussing the value of the String Project in the community and the exposure to string playing, respectively. One teacher wrote, “I see hundreds of students doing strings there. It is a great tool to promote the arts,” and another, “There would be little to no exposure to strings without it.”

Lastly, theme 6, which was only mentioned once, touched on the growth of new programs, which was a large component of the University of South Carolina String Project (Davis, 2011). One teacher wrote that the String Project was a “kick start for my middle school program that should kick off next year.” This mirrors the findings of Jesselson (1988), who reported that from the inception of the University of South Carolina String Project (USCSP) in 1974 through 1988, four districts in the Columbia, SC area added string programs, due largely in part to the work of the USCSP. Likewise, Owen (2004) reports that all Columbia, SC area schools have “large string and orchestra programs” (p.1153). Similar growth in public schools programs was also seen at the Junior String Project in Austin, TX (Crockett, 1960; Kovacs, 2010; Young, 1967).

In the written responses to the follow-up questions, only theme 2 was mentioned and it was mentioned by both the String Project director and the K-12 string teacher. The K-12 teacher mentioned that for some students, the String Project at Wayne is not accessible because of transportation and money. He wrote that for families at his school transportation and funds for tuition are not necessarily “easy to come by,” like they might be for middle class families. On the other hand, the String Project director describes how, for the majority of students in Detroit and the closer suburbs, string classes are not offered through the schools. For these students, the String Project is their only access or exposure to strings. She goes on to suggest that for suburban K-12 string students, the lack of accessibility may be due to emotional reasons:

I do know of a fair number of suburban string teachers, but have not had good luck connecting with them; the most responsive are a few recent graduates of WSU who have gotten jobs in the area and a couple of folks who have served as coop teachers for our students' field experiences. I'm not sure why that is. The majority of string programs here are in the suburbs, and I know that there is a kind of psychological "Berlin Wall" between city and suburbs here, with lots of suspicion and distrust on both sides, so that may play into it. (L. Roelofs, personal communication, April 22, 2012)

Chapter V

Discussion, Recommendations, and Conclusion

Discussion

The purpose of this study was to explore K-12 string teachers' perceptions of and experiences with the String Project at Wayne State University (Detroit, MI). Guided by five research questions, this study sought to collect demographics of K-12 teachers, their programs, and their students who participate in the String Project at Wayne, and also to ascertain the relationship between the String Project and the K-12 teachers. Despite the small sample, the results of this study revealed a wide range of experiences with and therefore perceptions of the String Project at Wayne. The results are summarized in regards to the research questions below.

Overall Perception and Perceived Influence of the String Project.

Due to the low response rate and small number of K-12 teachers with students who are dually enrolled in their school string programs and the String Project, it is impossible to generalize the responses received to the population at large. By and large, the K-12 teachers who responded indicated that the String Project has been a positive addition to the string community in the Detroit area. Respondents wrote that the String Project is a "good idea," a "great tool to promote the arts," and a "great program." Similarly, K-12 teachers commented that it helped students reach "higher levels than [the teacher was] able to do at school," and was a venue for students to continue their instruments if they moved to a school that did not offer strings. Likert item #6 seems to support this. (See Table 5)

Results suggest that the K-12 teachers who responded generally did not feel that the String Project has had much of an impact on their school programs. When asked about community support for school music programs since the inception of the String Project (Likert item #4), only one teacher strongly agreed. Similarly, only one of eight teachers agreed that the String Project had helped with the growth of string programs in the area (Likert item #11). However, in section three of the initial survey, one teacher indicated that the String Project was “a kick start for [their] middle school program that should kick off next year.”

None of the K-12 teachers who responded to the MSPPD had participated in the String Project as college students, so it is impossible to know if or how these teachers’ perceptions might differ from those teachers with no known association to the String Project.

Demographics of Student Participants vs. Non-Participants.

Of the teachers surveyed, very few have students who participate in String Project activities. Fewer than .8% ($n = 8$) of all students ($n = 1,006$) are also enrolled in String Project classes. The researcher speculates that, in actuality, this number may be even lower as some of the teachers who did not respond may not have had an interest because they do not have dually enrolled students. Only two middle school students and six elementary school students were identified as dually enrolled in the String Project and their school program. Even at the school with the largest number of dual enrolled students, there are still less than 50% of the students who also participate in the String Project. Though the String Project is available within 10 miles of the schools surveyed, dual enrollment is much lower than Byo and Cassidy’s (2005) findings that nation-wide

only 24% of String Project parents indicated that their child was also enrolled in their school program, mostly due to lack of availability. Of the 13 String Projects surveyed, Byo and Cassidy also only found five directors who stated that their programs supplemented existing school programs. In the current study, a teacher from an urban charter school offered the following insight:

At my school, all students take strings and choir in the 3rd and 4th grade. In 5th grade they choose between the two subjects and generally stick with that choice the remainder of their time here. When they choose to participate in the String Project they have already had 2 or 3 years of experience with the instrument and already know they like it enough to want to commit to participating in a more intense experience like the String Project. Most Detroit schools do not have string programs and so they don't have enough experience with the instrument to know whether they want to drive downtown twice a week and pay money to study the instrument further. For middle class parents, signing up for something like the String Project may not be viewed as a big commitment, because transportation and funds are readily available, but for low-income students it is a sign of significant interest since those things are not as easy to come by.

The String Project director added:

So far we haven't had a significant population of dual-enrolled students. Since most of the children in the city and inner-ring suburbs have no access to string instruction (especially for the 3rd-5th graders we accept as beginners), we have been able to fill our enrollment mainly with those kids. We would like to recruit more 5th-8th graders, with a couple of years of prior training, to join our Level III

Preparatory Orchestra, so hopefully in the coming years we'll have more dual-enrolled students. Off-hand I can only think of one local teacher I know for sure has an orchestra student participating in String Project. (L. Roelofs, personal communication, April 22, 2012).

Spain Elementary Middle School in Detroit is the only elementary school within the Detroit Public Schools that currently has students dually enrolled in the String Project and their school program (Roelofs, personal communication, April 22, 2012). When looking at all Detroit Public Schools elementary schools, the only distinguishing characteristic of Spain Elementary Middle School is its proximity in miles to the String Project. It is nearly 3 miles closer to Wayne State than any of the other elementary schools that offer string instruction. (See Table 4.) For a family with little to no access to transportation, this could be a significant factor. While one of the charter schools with dually enrolled students is also closely located to Wayne State (2.1 miles), the other is 9.8 miles away, much further than many of the other Detroit Public Schools.

Communication and Relationship.

There does not seem to be much communication or much of a relationship between the K-12 schools and the String Project. Most of the respondents ($n = 6$) did not have students who participate in the String Project. One had never heard of it. However, only about 1% of schools in the Detroit area offer string instruction as part of their day. It could be that the String Project is focusing on filling this gap in students' education, rather than reaching out to schools where programs already exist. This seems to be consistent with the general mission of the NSPC as well as research conducted by Davis at USC (2011). Perhaps holding satellite String Project classes at some of the more

outlying schools or involving String Project teachers in regular volunteer positions in the schools would aid in the growth of K-12 string programs.

One respondent proposed the question, “does the String Project want to have regular communication with the teachers at the schools?” The same teacher wrote that they believed that “inner-city parents and children need a lot more connective tissue between an auxiliary program like the String Project and [their] school” than students from a middle-class school district. However, the String Project seems to mostly enroll students from within the Detroit city limits. The String Project director wrote:

One very pragmatic reason why you may not hear back from the few remaining city string teachers is that every Detroit Public Schools teacher has been pink-slipped and won't know until late summer whether they have a job for next year. I do know of a fair number of suburban string teachers, but have not had good luck connecting with them; the most responsive are a few recent graduates of WSU who have gotten jobs in the area and a couple of folks who have served as coop teachers for our students' field experiences. I'm not sure why that is. The majority of string programs here are in the suburbs, and I know that there is a kind of psychological "Berlin Wall" between city and suburbs here, with lots of suspicion and distrust on both sides, so that may play into it.

This seems to support Gregory's (1995) finding that, regarding outreach, most often there is only informal communication between universities and K-12 schools. A thought-provoking continuation of Gregory's work could investigate this perceived resistance to collaboration by K-12 teachers.

Recommendations for Further Research

The relationship between the String Project at Wayne and the schools in the Detroit area is more complex than initially thought. Part of this may be due to the fact that the String Project at Wayne is only four years old and still growing. It would be interesting to repeat a similar study in several years after the String Project is more established. It would also be noteworthy to look at some of the other urban String Projects and compare K-12 teachers' perceptions, especially if a site is found with demographics that are similar to Detroit's.

In the present study, the only dually enrolled students identified were students at charter schools. The String Project at Wayne was unable to provide data regarding what schools their students attend, but the students who were identified by the K-12 teachers were all students at charter schools. Only one additional student from a public school was identified by the String Project director. It would be interesting to survey the parents of students enrolled in the String Project to determine if those parents are making other similar educational decisions, as well as their motivation for enrolling their child in the String Project.

Burton and Greher (2007) documented that inservice teachers who are involved in collaborative efforts are more likely to take steps to improve their own teaching through continuing professional development and action research. It would be fascinating to compare rates of professional development and completion of action research between K-12 teachers with students enrolled in String Projects and K-12 teachers without students enrolled in String Projects. Similarly, the same comparison could be done between K-12

teachers in districts surrounding a String Project and K-12 teachers where no String Project exists.

Lastly, it would be interesting to dig deeper into the separation between the students in the city and the students in the suburbs. Detroit is home to one of the preeminent symphony orchestras in the country, yet by all accounts, string students are not traveling into the city to take advantage of musical opportunities. A survey of other arts organizations/opportunities (youth orchestras, private teachers, recital venues, etc.) may help to paint a clearer picture of the social and cultural constructs that influence who takes advantage of which educational opportunity.

Conclusion

In retrospect, in order to try to achieve a better response rate, several things could have been done differently. A phone or face-to-face interview with the String Project director and some area teachers prior to distributing the survey could have alerted teachers to the study ahead of time, and also identified some of the complexities of the culture of string teaching in the Detroit area.

A more accurate list of K-12 string teachers in the Detroit area may have been helpful in achieving a higher response rate. At least eight schools were incorrectly identified by office staff as having string or orchestra programs, even to the extent of providing names and email addresses of teachers who are not string teachers. Several of these misidentified teachers responded that they were not string teachers well after the third mailing. Perhaps some of the people who did not respond are also not string teachers.

While the researcher did consult with the president of the Michigan chapter of the American String Teachers Association (ASTA) to try to determine who the K-12 string teachers were, perhaps working more closely with ASTA to advertise and distribute the survey would have resulted in a higher response rate. Additionally, surveying the String Project students about the musical opportunities available at their schools could have provided more information about who does attend String Project classes.

Collection of data regarding participants in the String Projects would serve to refine the program itself and expand its impact in general. It could also serve to garner more support for the National String Project Consortium (NSPC) by yielding evidence-based data. ASTA and the NSPC should add a research component to the String Projects so that all String Projects are responsible for collecting data pertaining to the K-12 students who are enrolled, and the K-12 string teachers in the area. This sort of material would make it possible for studies like this one that examine the peripheral components of the String Project can be conducted. Without this foundational information, it is difficult to truly determine the effect of the String Projects on their communities. Plourde's (2000) conclusions regarding what makes a successful outreach program as well as what skills are needed for a performer to be a successful teacher could be helpful in designing a measure for the effectiveness of the String Projects.

Additionally, ASTA should be collecting yearly data regarding which schools offer string instruction and who teaches the string classes that exist. While Byo and Cassidy (2005) collected data regarding dually enrolled string students, the state of string programs in K-12 schools has not been systematically examined in the past 10 years. Data of this sort would not only inform the present study, but would also serve as a

springboard for studies such as those conducted by Gillespie & Hamann (1998), and Hamann, Gillespie & Bergonzi (2002).

The results of the current study demonstrate a complex situation of string playing and teaching in the Detroit area. K-12 string programs exist mainly in the wealthier, predominantly white suburbs. Some larger charter and private schools offer string instruction as do a scattering of schools within the Detroit Public Schools. The vast majority of K-12 students in the Detroit area have no access to string instruction through their schools. More descriptive studies examining what kinds of string programs exist and who teaches in those programs are certainly needed.

The String Project at Wayne is helping to fill a void where there are no school programs, but does not necessarily reach out to K-12 teachers in the community nor does it attract students already enrolled in their school string programs. Unfortunately, with the uncertain future of string programs in the Detroit Public Schools, this may be the case for the foreseeable future. One would hope that, as Davis (2011) describes in her case study of the USC String Project, eventually the String Project at Wayne will aid in the development of new programs in the surrounding schools. Parent pressure seems to have been instrumental in the development of K-12 string programs in both Columbia, SC (Jesselson, 1988; Owen, 2004) and Austin, TX (Crockett, 1960; Kovacs, 2010), but many not be enough in a city with the dire financial situation of Detroit. Perhaps beginning an adult education component to the String Project at Wayne or expanding the community music opportunities at the university through working with an organization like New Horizons or the Detroit Symphony could lead to a more widespread and collective approach to music education in a city where traditional instruction and funding may not

be possible. A collaborative approach like this would also strengthen the mission found on the String Project at Wayne's website:

In an urban area where school arts programs are disappearing, the project is a resource for children, and a point of hope for the future. We have faith that string education can flourish in our community and in our schools with teamwork, advocacy and grassroots support (String Project at Wayne, 2012).

Until the String Project at Wayne reaches a point where there are a significant number of dually enrolled students, it will be hard to discern the K-12 String Teachers' perception of the String Project, at least insofar as how it impacts their classroom on a day to day basis. Additionally, without a significant number of dually enrolled students, it seems frivolous to study K-12 teachers' perceptions of the String Project because there is little to no interaction between the String Project and K-12 teachers without enrolled students.

References

- Abeles, H. (2004). The effect of three orchestra/school partnerships on students' interest in instrumental music instruction. *Journal of Research in Music Education*, 53(3), 248-263.
- Abrahams, F. (2011). Nurturing preservice music teacher dispositions: Collaborating to connect practice, theory, and policy. *Arts Education Policy Review*, 112(3), 108-114. doi:10.1080/10632913.2011.566076
- American heritage collegiate dictionary* (2nd ed.). (1985). Boston: Houghton Mifflin.
- American String Teachers Association with the National School Orchestra Association. (n.d.). *String Project*. Retrieved November 30, 2005, from <http://www.astaweb.com/stringproject.htm>
- Babineau, N. (1998). *Enriching their communities: Education and outreach activities of Canadian orchestras*. Toronto: Orchestras Canada.
- Bowers, J. (2001). A field experience partnership for teacher education with university, public school, and community participants. *Bulletin of the Council for Research in Music Education*, 148, 3-11.
- Brenner, B. (2011). The fairview project - An overview. *Ovation Press String Visions*. Retrieved January 20, 2012, from <http://stringvisions.ovationpress.com/2011/10/fairview-project-overview/>
- Burton, S. L. (2001). Perspective consciousness and cultural relevancy: Partnership considerations for the re-conceptualization of music teacher preparation. *Arts Education Policy Review* 112(3), 122-129. doi:10.1080/10632913.2011.566082
- Burton, S.L. & Greher, G.R. (2007). School-university partnerships: What do we know and why do they matter? *Arts Education Policy Review* 109(1), 13-22.
- Byo, J.L. & Cassidy, J.W. (2005). The role of the string project in teacher training and community music education. *Journal of Research in Music Education* 53(4), 332-347.
- Carlisle, K. (2011). Arts education partnerships: Informing policy through the development of culture and creativity within a collaborative project approach. *Arts Education Policy Review*, 112(3), 144-148. doi:10.1080/10632913.2011.566088
- City-Data.com. (n.d.). Retrieved May 15, 2012 from <http://www.city-data.com>

- Crockett, F. M., Jr. (1960). An analysis and evaluation of the University of Texas program of string teacher preparation. *Dissertation Abstracts International*, 21 (10), 3112.
- Davis, S.A. (2011). *Acts of hospitality: A case study of the University of South Carolina String Project* (Doctoral dissertation, New York University). Retrieved from <http://www.stringprojects.org/>
- Detroit Public Schools. (n.d.). *Parent Resources*. Retrieved June 27, 2012, from <http://detroitk12.org/resources/parents/>
- Dossa, E. (1997). On a mission: The Ying Quartet reaches out. *Strings* 12(2), 56-63.
- Dyer, T. (1999). Retrospect and prospect: Understanding the American outreach university. *Journal of Public Service & Outreach*, 4(1), 52-64.
- Ferguson K. (2003). Becoming a string teacher. *Bulletin of the Council for Research in Music Education*, 175, 38-48.
- Freiberg, S. (1999). Teaching the teacher. *Strings*, 13(8), 38-43.
- Freiberg, S. (2002). Golden ears: Nationwide orchestra program offers adults a change to learn a stringed instrument. *Strings*, 17(2), 90-95.
- Gillespie, R. & Hamann, D. L. (1998). The status of orchestra programs in the public schools. *Journal of Research in Music Education*, 46(1), 75-86.
- Google Maps. (n.d.). Retrieved May 16, 2012 from <http://maps.google.com>
- Gregory, M.K. (1992). Collaboration for music teacher education between institutions of higher education and K-12 schools. *Dissertation Abstracts International*, 53 (04), 1089A. (UMI No. 9222846)
- Gregory, M. K. (1995). Collaboration for music teacher education between higher education institutions and K-12 schools. *Journal of Research in Music Education*, 43(1), 47-59.
- Greher, G.R. (2011). Music technology partnerships: A context for music teacher preparation. *Arts Education Policy Review*, 112(3), 130-136.
doi:10.1080/10632913.2011.566083
- Hamann, D. L., Gillespie, R. & Bergonzi, L. (2002). Status of orchestra programs in the public schools. *Journal of String Research*, 2.
- Henry, W. (2001). Music teacher education and the professional development school. *Journal of Music Teacher Education*, 10(2), 23-28.

- Himes, J. (1993). Symphonic educational programs: A study of the Fairfax symphony orchestra. *Masters Abstracts International*, 31 (03), 994. (UMI No. 1350720)
- Hunter, L.R. (2011). School-university partnerships: A means for the inclusion of policy studies in music teacher education. *Arts Education Policy Review*, 112(3), 137-143. doi: 10.1080/10632913.2011.566086
- James, B. J., & Fagaly, R. D. (1972). Organizational marginality and opportunity in university outreach education. *Journal of Higher Education*, 43(8), 646-654.
- Jesselson, R. (1988). The University of South Carolina string project: A success story in the making. *American String Teacher*, 38(3), 26-28.
- Kantorski, V. J. (1995). A content analysis of doctoral research in string education, 1936-1992. *Journal of Research in Music Education*, 43(4), 288-297.
- Kite, C. (1990). Training music students for a career in instrumental teaching; A conservatoire's point of view. *British Journal of Music Education*, 7(3), 263-267.
- Kovacs, I. (2010). The life and influence of string pedagogue Phyllis Young (b. 1925): From the Kansas Plains through the University of Texas String Project. *Dissertation Abstracts International-A*, 71 (05), Nov 2010.
- La Jolla Chamber Music Society. (n.d.). *Community music center*. Retrieved December 10, 2006, from http://www.la-jolla-music-society.com/outreach/community_music_center.html
- Murphy, F., Rickard, N., Gill, A., & Grimmett, H. (2011). Informing new string programs: Lessons learned from an Australia experience. *British Journal of Music Education*, 28(3), 285-300. doi:10.1017/S0265051711000210
- National String Project Consortium (2006). *About the national string project consortium*. Retrieved January 27, 2007, from <http://www.stringprojects.org/leveltwo/AbouttheNationalStringProjectConsortium-5.asp>
- Nelson, D. J. (1983). String teaching and performance: A review of research findings. *Bulletin of the Council for Research in Music Education*, 74, 39-47.
- New Horizons International Music Association. (n.d.). *New Horizons Organizations*. Retrieved November 14, 2006, from http://www.newhorizonsmusic.org/groups/nh_groups_page.htm
- Owen, L. (2004). Lighting up faces. *The Strad*, 115(1375), 1150-1153.

- Plourde, A. W. (2000). Training musicians to perform for and work with children: Case studies of innovative programs at the Eastman School of Music, the Manhattan School of Music, and the New England Conservatory. *Dissertation Abstracts International* 61(04), 1677A. (UMI No. 9971164)
- Reel, J. (2004). Class act. *Strings* (18)9, 43-48.
- Renshaw, P. (1986). Towards the changing face of the conservatoire curriculum. *British Journal of Music Education*, 3(1), 79-90.
- Robinson, M. (1998). A collaboration model for school and community music education. *Arts Education Policy Review*, 100(2), 32-40.
- Roelofs, L. (personal communication, April 22, 2012).
- Rothenberg, D. (2004). You will always have a friend. *American Suzuki Journal*, 32, 52-53.
- Royer, R. (2007). Soundstreams Canada educational outreach string project. *Canadian Music Educator*, 48(4), 18-19.
- Ruffer, D. (1988). The London sonfonietta education programme – An analysis of an interface between the professional artist and music in education. *British Journal of Music Education*, 5(1), 45-54.
- Schmidt, M. (2005). Preservice string teachers' lesson-planning process: An exploratory study. *Journal of Research in Music Education*, 53(1), 6-25.
- Shaw, G. R. (1998a). Decatur youth symphony orchestra: A study of why we play. *Dialogue in Instrumental Music Education*, 22(1), 29-35.
- Shaw, G. R. (1998b). Decatur youth symphony orchestra II: Learn and serve project. *Dialogue in Instrumental Music Education*, 22(2), 107-111.
- Single, N. A. (1991). An arts outreach/audience development program for schools of music in higher education (Doctoral dissertation, The Ohio State University, 1991). *Dissertation Abstracts International*, 52, 1568.
- String Project at Wayne. (2012). *String Project*. Retrieved June 27, 2012 from <http://www.music.wayne.edu/stringproject/>
- Undercofler, J. F. (1997). Music in America's schools: A plan for action. *Arts Education Policy Review* 98(6), 15-20.
- United States Department of Education. (n.d.). *National Center for Education Statistics*. Retrieved January 16, 2012 from <http://nces.ed.gov>

- Wayne State University. (2012). *About WSU*. Retrieved June 27, 2012 from <http://wayne.edu/about/>
- Williams, R. (2011). Professor hunts for link between violin studies and high IQs [Electronic version]. *Strings*, 25(191).
- Winzenrid, R. (2003). Maybe I'll become an orchestra musician. *Symphony*, 54(1), 52-53.
- Young, P. (1967). The University of Texas String Project. *The Instrumentalist*, 21(10), 50-53.

Appendix A

Measure of String Project Perceptions in Detroit

Section One – Introductory/Demographic Information

For all questions below, please answer the questions in the blanks provided.

1. Have you, as a teacher or instructor worked in the String Project at Wayne?

2. Using the blanks below, please indicate your FTE for each level of strings:

FTE

Elementary School _____

Middle School/Junior High _____

High School/Senior High _____

Other Strings _____

3. Please indicate how many students are currently enrolled in each of the classes below and the number that are also enrolled in the String Project at Wayne.

	# Enrolled	# in String Project	Don't Know
Elementary School Strings ("pull out")	_____	_____	_____
Elementary School Strings (non "pull out")	_____	_____	_____
Elementary Orchestra	_____	_____	_____
Middle School/Jr. High Full Orchestra	_____	_____	_____
Middle School/Jr. High String Orchestra	_____	_____	_____
Senior High Full Orchestra	_____	_____	_____
Senior High String Orchestra	_____	_____	_____
Other	_____	_____	_____

Section Two

For the questions below, please circle the best answer unless otherwise indicated.

Abbreviations are as follows: SA = Strongly Agree, A = Agree, U = Undecided,

D = Disagree, SD = Strongly Disagree

- | SA | A | U | D | SD | |
|----|---|---|---|----|-------------------------------------------------------------------------------------------------------------------------------------------|
| | | | | | 1. I feel that my students who are involved in the String Projects learn more quickly than my students who are not. |
| | | | | | 2. My students in the String Project learn different skills/technique than I would teach them in class. |
| | | | | | 3. I believe that students who are involved in the String Project are more enthusiastic about string playing than those who are not. |
| | | | | | 4. My community is more supportive of music in general because of the String Project. |
| | | | | | 5. I think that my students who are involved in the String Project have a better overall musical experience than my students who are not. |
| | | | | | 6. I believe that the String Project has had a positive impact on my community. |
| | | | | | 7. I think that my students who are involved in the String Project have more technical skills than my students that are not. |

SA	A	U	D	SD	8. I feel like there is a lack of communication between my program and the String Project.
SA	A	U	D	SD	9. I believe that collaboration with the String Project has helped my program.
SA	A	U	D	SD	10. I feel that my students who are NOT involved in the String Project are put at a disadvantage.
SA	A	U	D	SD	11. The presence of the String Project in my community has helped with the growth of string programs in the area.
SA	A	U	D	SD	12. I have had to restructure my program because of involvement with the String Project.
SA	A	U	D	SD	13. I feel that the String Project has had a negative impact on my program.
SA	A	U	D	SD	14. I think that the String Project is NOT accessible to many of my students.
SA	A	U	D	SD	15. My community is more aware of my program because of the involvement with the String Project.
SA	A	U	D	SD	16. I think my program has improved since the inception of the String Project at Wayne.
SA	A	U	D	SD	17. It is difficult to have String Project students and non-String Project students in one class.

SA	A	U	D	SD	18. My school system has provided more funds for music education since collaboration with the String Project.
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SA	A	U	D	SD	19. I feel like my community is more involved in my program since collaboration with the String Project.
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Section Three - Follow-Up Questions

Please answer the following questions in the spaces provided.

1. How, if at all, does the String Project at Wayne influence your program?
2. What differences, if any, have you noticed in your program since the String Project at Wayne began?
3. How is the String Project at Wayne visible in your school community?
4. What other impact, both positive and negative, has the String Project at Wayne had on school string programs in South East Michigan?

Appendix B

Additional Information Sheet for Returned Surveys

School: _____

District: _____

District Enrollment: _____

Distance (in miles) to nearest SPatWayne: _____

Average Student-Teacher Ratio: _____

% Free/Reduced Lunch: _____

Rural vs. Urban: _____

Fiscal Amount per Student: _____

Appendix C

Locations of String Programs by District or City

Table C1

Public School Districts with String Programs by District

School District	Number of Schools
Berkley School District	2
Dearborn City School District	16
Detroit City School District	15
Ferndale Public Schools	5
Grosse Pointe Public Schools	15
School District of the City of Royal Oak	3
Southfield Public School District	2

Table C2

Charter Schools and Private Schools with String Programs by City

City	Number of Schools
Detroit	15
Grosse Pointe Farms	1
Grosse Pointe Woods	1
Royal Oak	1
Southfield	1

Appendix D

Additional Follow-up Questions for Select Respondents

Questions for Teachers with students who are dually enrolled in the String Project and a school program:

1. Why do you think your school has students that participate in the String Project when there are so many schools in the Detroit area that don't have students participating?
2. Most respondents from my original survey indicated that there was not a lot of communication between themselves and the String Project. Why do you think this is? In your opinion, could something be done to improve or make communication more successful?

Questions for Teachers without students enrolled in the String Project:

1. Why do you think that your students are not participating in the String Project?
2. Most respondents from my original survey indicated that there was not a lot of communication between themselves and the String Project. Why do you think this is? In your opinion, could something be done to improve or make communication more successful?

Appendix E

Locations of String Programs in the Detroit Public Schools

Table E1

A comparison of Detroit Public Schools with and without String Programs

School	Str	#Stu	%F/R	Race	2010 Income	Home Value
Cass HS	N	2195	46.7	B	19,903	150,062
Crockett	N	†	†	B	19,903	150,062
Detroit Behavioral	N	†	†	B	19,903	150,062
Day School for Deaf	N	427	49.4	B	19,903	150,062
Det. School of Arts	Y	724	57.3	B	19,903	150,062
Edmonson	N	241	86.3	B	19,903	150,062
Spain	Y	831	76.2	B	19,903	150,062
Barasmian	N	51	82.4	B	22,709	80,208
International Acad.	N	553	74.3	B	22,709	80,208
Golightly	N	644	64.4	B	22,709	80,208
Riverside	N	†	†	B	22,709	80,208
Greenfield Union	N	519	74.9	B	28,563	81,725
Nolan	N	825	94.1	B	28,563	81,725
Barton	N	275	82.5	B	24,306	60,750
DABO	N	†	†	†	24,306	60,750
Trans. Center E.	N	271	98.9	B	24,306	60,750
Trans. Center W.	N	†	†	†	24,306	60,750
Keidan	N	189	73.5	B	24,306	60,750
Sampson	N	506	92.1	B	24,306	60,750
Sherrill	N	552	78.1	B	24,306	60,750
Scott Academy	N	495	88.1	†	33,427	68,521
Brewer	N	737	83.1	†	33,427	68,521
Fisher Magnet (Upper)	N	866	91.5	B	33,427	68,521
Fisher Magnet (Lower)	N	922	81.6	B	33,427	68,521
Osborn Mathematics	N	113	91.2	B	33,427	68,521
Osborn College Prep	N	119	85.7	B	33,427	68,521
Osborn Design	N	104	77.9	B	33,427	68,521
Osborn Global	N	900	71.4	B	33,427	68,521
Pulaski	N	653	90.9	B	33,427	68,521
Trix	N	582	81.1	B	33,427	68,521
Turning point	N	40	87.5	B	33,427	68,521
Wilkins	N	389	80.2	B	33,427	68,521
Central HS	N	914	80.4	B	22,615	63,671
Durfee	N	797	76.8	B	22,615	63,671
Thirkell	N	414	93.9	B	22,615	63,671
Bunche	N	257	92.9	B	29,653	97,506
Chrysler	N	177	45.7	B	29,653	97,506

Table E1 (continued)

School	Str	#Stu	%F/R	Race	2010 Income	Home Value
King HS	Y	1375	68.6	B	29,653	97,506
Burton International	N	635	55.7	B	21,187	64,591
Douglass Academy	N	312	90.0	B	21,187	64,591
Ferguson Academy	N	288	83.6	B	21,187	64,591
Hutchins	N	493	84.3	B	21,187	64,591
Northwestern HS	N	1391	73.4	B	21,187	64,591
West Side Academy	N	643	92.3	B	21,187	64,591
Beard	N	68	95.5	H	26,937	63,193
Bennett	N	534	96.4	H	26,937	63,193
Clemente Academy	Y	796	93.4	H	26,937	63,193
Clippert Academy	N	446	89.2	H	26,937	63,193
Earhart	N	575	91.6	H	26,937	63,193
Harms	N	621	95.8	H	26,937	63,193
Maybury	Y	614	97.5	H	26,937	63,193
Neinas	N	379	95.5	H	26,937	63,193
Phoenix	N	535	98.6	H	26,937	63,193
Southwestern HS	N	993	80.0	H	26,937	63,193
Western HS	N	1728	74.7	H	26,937	63,193
Academy of the Americas	N	659	86.4	H	24,071	54,237
Logan	Y	587	76.1	B	24,071	54,237
O.W. Holmes	N	634	89.4	W/H	24,071	54,237
Priest	N	741	90.1	H	24,071	54,237
Loving	N	301	98.3	B	22,840	48,284
Davison	N	714	93.8	B/A	25,273	54,163
White	N	780	91.9	B	25,273	54,163
A.L. Holmes	N	506	88.5	B	23,972	53,925
Blackwell Institute	N	712	84.2	B	23,972	53,925
Crockett	N	881	64.9	B	23,972	53,925
School of Arts East	Y	603	81.2	B	23,972	53,925
Hamilton	N	634	82.9	B	23,972	53,925
Hutchinson	N	394	91.6	B	23,972	53,925
Kettering HS	N	945	72.6	B	23,972	53,925
Kettering West Wing	N	236	90.6	B	23,972	53,925
Trombly	N	371	80.3	B	23,972	53,925
William Beckham	N	690	81.3	B	23,972	53,925
Detroit Lions	N	131	92.3	B	25,771	75,876
Garvey Academy	N	661	88.3	B	25,771	75,876
How	N	450	84.4	B	25,771	75,876
Moses Field	N	162	82.0	H	25,771	75,876
Nichols	N	428	89.9	B	25,771	75,876
Southeastern HS	N	2233	76.4	B	25,771	75,876
Carstens	N	242	87.1	B	39,663	102,268
Finney HS	N	647	70.7	B	39,663	102,268

Table E1 (continued)

School	Str	#Stu	%F/R	Race	2010 Income	Home Value
Golightly Center	N	†	†	B	39,663	102,268
Robinson	N	556	87.2	B	39,663	102,268
Webster	N	314	91.0	H	24,086	85,318
Mark Twain	N	335	89.5	B	31,074	76,629
Charles Wright	N	697	71.8	B	40,939	85,761
School of Arts West	N	299	77.2	†	40,939	85,761
Emerson	N	284	91.9	B	40,939	85,761
Ford HS	N	1206	81.6	B	40,939	85,761
Ludington	Y	648	56.7	B	40,939	85,761
Bagley	N	473	80.5	B	37,887	109,391
Bates	Y	855	34.9	B	37,887	109,391
Hally	N	376	65.6	B	37,887	109,391
MacDowell	Y	400	79.5	B	37,887	109,391
Mumford HS	N	1962	61.0	B	37,887	109,391
Palmer Park	N	575	79.1	†	37,887	109,391
Pasteur	N	360	79.4	B	37,887	109,391
Schulze	N	704	77.8	B	37,887	109,391
Cooke	N	344	71.8	B	37,816	79,905
Gompers	N	308	84.4	B	37,816	79,905
Murphy	N	572	80.4	B	37,816	79,905
Vetal	N	495	77.5	B	37,816	79,905
Carleton	N	450	92.2	B	41,917	97,596
Denby HS	N	1172	72.2	B	37,816	79,905
J.E. Clark	N	650	85.8	†	37,816	79,905
Ronald Brown	N	1124	81.9	B	37,816	79,905
Wayne	N	435	87.1	B	37,816	79,905
Burns	N	671	96.8	B	30,574	71,579
Coleman A. Young	N	599	81.9	B	30,574	71,579
Comm. and Media Arts HS	N	477	46.9	B	30,574	71,579
Dossin	N	344	87.5	B	30,574	71,579
Edison	Y	339	84.3	B	30,574	71,579
Fitzgerald Bethune	N	629	84.2	†	30,574	71,579
King Academy	Y	867	87.0	B	30,574	71,579
Oakman	N	242	69.0	B	30,574	71,579
Parker	N	522	78.9	B	30,574	71,579
Critical Thinkers at Cody	N	104	87.5	B	30,271	78,323
Breithaupt	N	†	†	†	30,271	78,323
Carver	N	500	79.4	B	30,271	78,323
Cody Academy	N	98	81.6	B	30,271	78,323
Cody College Prep	N	889	70.4	B	30,271	78,323
Detroit Institute of Tech.	N	77	93.5	B	30,271	78,323
Dixon	N	586	86.8	B	30,271	78,323
Gardner	N	232	96.5	B	30,271	78,323

Table E1 (continued)

School	Str	#Stu	%F/R	Race	2010 Income	Home Value
Henderson	N	737	91.4	B	30,271	78,323
Mae C Jemison	N	473	81.8	B	30,271	78,323
Mann	N	387	91.4	B	30,271	78,323
Medicine and Com. Health	N	108	86.1	B	30,271	78,323
Davis Aerospace HS	N	206	80.5	B	29,334	63,701
Farwell	N	460	90.0	B	29,334	63,701
Law	N	881	86.8	B	29,334	63,701
Mason	N	370	92.4	B	29,334	63,701
Pershing HS	N	1177	74.6	B	29,334	63,701
Van Zile	N	435	96.0	B	29,334	63,701
Bow	N	453	68.4	B	37,751	84,620
Foreign Lang. Immersion	N	635	41.7	B	37,751	84,620
White Center HS	N	276	82.2	B	37,751	84,620
Randolph	N	2	0	B	37,751	84,620
Renaissance HS	Y	1038	30.0	B	37,751	84,620
Rutherford	N	418	86.3	B	37,751	84,620
Vernor	N	326	77.3	B	37,751	84,620
Marquette	N	834	84.4	B	83,871	252,148
Detroit City HS	N	594	73.2	B	24,929	56,712
Glazer	N	282	88.2	B	24,929	56,712
Hancock	N	43	76.6	B	24,929	56,712
Noble	N	528	82.5	B	24,929	56,712
Robeson	N	535	68.9	B	24,929	56,712
Stewart	N	677	93.0	B	24,929	56,712
Thurgood Marshall	N	365	91.2	B	24,929	56,712

Note. † = data not available; Str = school offers strings; #Stu = number of students enrolled; %F/R = percent of students receiving free/reduced lunch; Race = predominant race at school; 2010 income = median household income for 2010 by district zip code; Home value = median home value for 2010 by district zip code; Y = yes; N = no; H = Hispanic; B = black; W = white; A = Asian.

Appendix F

Institutional Review Board Approved Documents

INDIANA UNIVERSITY INSTITUTIONAL REVIEW BOARD (IRB) DOCUMENTATION OF REVIEW AND APPROVAL (DRA)

Reviewing IRB (please choose one):IRB STUDY NUMBER: 1110007261

Biomedical: ☐ IRB-02 ☐ IRB-03 ☐ IRB-04 ☐ IRB-05
Behavioral: ☐ IRB-01 ☒ IUB IRB

Please type only in the gray boxes. To mark a box as checked, double-click the box, select "checked", and click "OK".

SECTION I: INVESTIGATOR INFORMATION**Principal Investigator** (advisor in the case of student/fellow/resident research):Name (Last, First, Middle Initial): May, Lissa F.Department: Music EducationPhone: 812-855-6343E-Mail: lamay@indiana.eduFax: n/aAddress: Simon Center, M145G**Co-Principal Investigator** (for student/fellow/resident research):Name: Sleator-McNally, Meredith L.Phone: 509-496-2303E-Mail: msleator@gmail.com

☒ Student: ☐ Fellow ☐ Resident
☐ Undergraduate
☒ Graduate

Additional Study Contact:Name: Dr. Brenda BrennerPhone: 812-855-0989E-Mail: bbrenner@indiana.edu

Dr. Peter Miksza

812-855-7253

pmiksza@indiana.edu

Project Title: AN INVESTIGATION OF K-12 STRING TEACHERS' PERCEPTIONS OF MUSICAL OUTREACH AND THE NATIONAL STRING PROJECT CONSORTIUM IN DETROIT, MICHIGAN

Sponsor/Funding Agency: n/a

PI on Grant: _____

Sponsor Protocol #/Grant #: _____ Period: from: _____ to _____

Sponsor Type: ☐ Federal ☐ State ☐ Industry ☐ Not-for-Profit ☐ Unfunded ☐ Internally FundedFunding Status: ☐ Pending ☐ Funded ☒ N/A

Grant Title (if different from project title): _____

SECTION II: TYPE OF REVIEW

☐ Exempt Review
☒ Expedited Review
☐ Full Board Review (Choose One) → ☐ Behavioral: ☐ IRB-01 ☐ IU Bloomington IRB
☐ Biomedical: ☐ IRB-02 ☐ IRB-03 ☐ IRB-04 ☐ IRB-05

SECTION III: DOCUMENTS INCLUDED WITH RESEARCH SUBMISSION

<input type="checkbox"/> Assent, dated: _____ Number of assent documents: _____	<input type="checkbox"/> Protocol, dated: _____
<input type="checkbox"/> Authorization, dated: _____ Number of authorizations: _____	<input checked="" type="checkbox"/> Recruitment materials (please list and date): Initial Letter, 2 Follow-up Letters, Final Letter <u>11/22/11</u>
<input type="checkbox"/> Clinical Investigator's Brochure, dated: _____	<input type="checkbox"/> Request form(s) for vulnerable population(s) (please list and date): _____
<input checked="" type="checkbox"/> Expedited Research Checklist, dated: <u>10/18/11</u>	<input checked="" type="checkbox"/> Surveys, questionnaires (please list and date): <u>Survey 12/1/11</u>
<input type="checkbox"/> Exempt Research Checklist, dated: _____	<input checked="" type="checkbox"/> Summary Safeguard Statement or HUD Form, dated: <u>12/1/11</u>
<input type="checkbox"/> HIPAA & Recruitment Checklist, dated: _____	<input checked="" type="checkbox"/> Study Information Sheet
<input type="checkbox"/> Informed Consent, dated: _____ Number of consent documents: _____	<input type="checkbox"/> Other (please list and date): _____
<input checked="" type="checkbox"/> Investigator List, dated: <u>10/18/11</u>	

SECTION IV: INVESTIGATOR STATEMENT OF COMPLIANCE

By submitting this form, the Principal Investigator assures that all information provided is accurate. He/she assures that procedures performed under this project will be conducted in strict accordance with federal regulations and Indiana University policies and procedures that govern research involving human subjects. He/she acknowledges that he/she has the resources required to conduct research in a way that will protect the rights and welfare of participants, and that he/she will employ sound study design which minimizes risks to subjects. He/she agrees to submit *any* change to the project (e.g. change in principal investigator, research methodology, subject recruitment procedures, etc.) to the Board in the form of an amendment for IRB approval prior to implementation.

SECTION V: IRB APPROVAL

This research project, including all documents included with the submission (e.g., informed consent statement, authorization, and/or waiver of authorization) has been reviewed and approved by the Indiana University IRB for a maximum of a one year period unless otherwise indicated as follows: _____

☐ Exempt Category(ies), if applicable: 7
☒ Expedited Category(ies), if applicable: 7

Authorized IRB Signature: _____

IRB Approval Date: 1/20/12

Printed Name of IRB Member: John M Kennedy

For IU Human Subjects Office use only.

Recorded in the Minutes of: _____

INDIANA UNIVERSITY INSTITUTIONAL REVIEW BOARD (IRB)

STUDY AMENDMENT

Reviewing IRB (please choose one):

Biomedical: ☐ IRB-02 ☐ IRB-03 ☐ IRB-04 ☐ IRB-05Behavioral: ☐ IRB-01 ☒ IUB IRBIRB STUDY NUMBER: 1110007261AMENDMENT NUMBER: A001 - 002*Please type only in the gray boxes. To mark a box as checked, double-click the box, select "checked", and click "OK".*

SECTION I: INVESTIGATOR INFORMATION

Principal Investigator:

Name (Last, First, Middle Initial): May, Dr. Lissa E.Department: Music EducationPhone: 812-855-6343E-Mail: lamay@indiana.edu

Additional Study Contact:

Name: Sleator-McNally, Meredith L. Phone: 509-496-2303E-Mail: msleator@gmail.comProject Title: AN INVESTIGATION OF K-12 STRING TEACHERS' PERCEPTIONS OF MUSICAL OUTREACH AND THE NATIONAL STRING PROJECT CONSORTIUM IN DETROIT, MICHIGANSponsor/Funding Agency: n/aSponsor Number: n/aSponsor Amendment Number: n/a

SECTION II: STUDY INFORMATION

This study is:

- ☒ Open to enrollment
☐ Closed to enrollment

Number of active subjects: 0

SECTION III: AMENDMENT DESCRIPTION

1. Provide a complete description of the proposed change(s) included in this amendment:

There are two proposed changes described below:

- Several questions have been removed from the survey instrument and the wording has been changed on a couple of the other questions. (See attached.)
- I would like to have the option of making the initial contact with subjects via USPS rather than just via email. The proposed communication is attached. No changes are proposed to the final letter.

2. State the justification/rationale for this amendment. If risks are being updated, please provide specific justification:

The justification/rationale for these amendments are provided below:

- Upon review of the survey instrument, it was determined that some of the questions were either redundant or unclear. Changes have been proposed that will make it easier and less time-consuming for subjects to complete the survey.
- Several of the potential subjects have no email addresses available.

The risks do not change and therefore are not being updated.

3. Is the study sponsored?

- ☒ No.
☐ Yes. Check the appropriate line below and provide with this amendment, as applicable:
☐ A copy of the sponsor's amendment, if the amendment came from the sponsor.
☐ A copy of your notice to the sponsor of this change, if you initiated the amendment.
☐ A copy of the approved amendment will be sent to the sponsor.
☐ None of the above apply. Please explain: _____

4. Do the proposed change(s) described in this amendment alter the risk to benefit assessment?

- ☒ No.
☐ Yes. Please describe how the assessment is altered: _____

5. Do the proposed change(s) described in this amendment require changes to the informed consent and/or assent document(s) or process?
- ☐ N/A. Informed consent, written documentation of informed consent, and/or assent has been waived for this study. Skip to item 6 below.
- ☒ No. Skip to item 6 below.
- ☐ Yes. Answer items A and B below.
- A. Check the appropriate line below.
- ☐ The new informed consent and/or assent document(s) are in addition to the current one(s).
- ☐ The new informed consent and/or assent document(s) replace the current one(s).
- If there are multiple consent and/or documents for this study, please indicate which consent and/or assent document(s) are to be replaced. _____
- ☐ N/A. Changes are being made to the informed consent process only and informed consent document(s) will not change.
- B. Will enrolled subjects be informed of the change(s) described in this amendment?
- ☐ No. Please explain why not: _____
- ☐ Yes. Will enrolled subjects be re-consented and/or re-assented?
- ☐ Yes.
- ☐ No. Please explain how enrolled subjects will be notified: _____

SECTION IV: CO-INVESTIGATOR UPDATE

- ☒ This submission does NOT include additions or removals to the Investigator List. *Proceed to Section V.*
- ☐ This submission includes additions or removals to the Investigator List. The updated Investigator List is attached.

The following investigators are being added to the current Investigator List:

The following investigators are being **removed** from the Investigator List and will no longer be participating in this research:

SECTION V: AMENDMENT SUMMARY

Amendment includes:

- | | |
|-------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> Assent, dated: _____ | <input type="checkbox"/> Protocol, dated: _____ |
| Number of assent documents: _____ | <input checked="" type="checkbox"/> Recruitment materials (please list and date): <u>RCR Ltr Mail, RCR Ltr2 Mail, RCR Ltr3 Mail, (all dated 2/23/12)</u> |
| <input type="checkbox"/> Authorization, dated: _____ | <input type="checkbox"/> Request form(s) for vulnerable population(s) (please list and date); _____ |
| Number of authorizations: _____ | <input checked="" type="checkbox"/> Surveys, questionnaires (please list and date): <u>Survey (2/23/12)</u> |
| <input type="checkbox"/> Clinical Investigator's Brochure, dated: _____ | <input type="checkbox"/> Summary Safeguard Statement or HUD Form, dated: _____ |
| <input type="checkbox"/> Expedited Research Checklist, dated: _____ | <input type="checkbox"/> Study Information Sheet |
| <input type="checkbox"/> Exempt Research Checklist, dated: _____ | <input type="checkbox"/> Other (please list and date): _____ |
| <input type="checkbox"/> HIPAA & Recruitment Checklist, dated: _____ | |
| <input type="checkbox"/> Informed Consent, dated: _____ | |
| Number of consent documents: _____ | |
| <input type="checkbox"/> Investigator List, dated: _____ | |

NOTE: Only documents that are being changed as a result of the amendment should be attached and checked in items 6 above. Listing document dates are optional and only necessary if required by the investigator or sponsor.

NOTE TO INVESTIGATORS: Study amendments may not be instituted until approval from the IRB is given.

Please indicate the type of amendment you are submitting. Please see the Guidelines for Determining an Amendment Type available on the IU Human Subjects Office website for additional information. **Please note that the IRB makes the final determination with regard to whether or not the amendment is acceptable for expedited review or if it requires review at a convened IRB meeting.**

☒ **Minor Amendment.** Change(s) do not significantly affect the safety of subjects and is acceptable for expedited review per 45 CFR 46.110(b)(2)/21 CFR 56.110(b)(2).

☐ **Major Amendment.** Changes potentially involve increased risks or discomforts or decrease potential benefit. The amendment requires review at a convened IRB meeting.

SECTION VI: INVESTIGATOR STATEMENT OF COMPLIANCE

By submitting this form, the Principal Investigator assures that all information provided is accurate. He/she assures that procedures performed under this project will be conducted in strict accordance with federal regulations and Indiana University policies and procedures that govern research involving human subjects. He/she acknowledges that he/she has the resources required to conduct research in a way that will protect the rights and welfare of participants, and that he/she will employ sound study design which minimizes risks to subjects. He/she agrees to submit *any* change to the project (e.g. change in principal investigator, research methodology, subject recruitment procedures, etc.) to the Board in the form of an amendment for IRB approval prior to implementation.

SECTION VII: IRB APPROVAL

This amendment, including documentation noted above, has been reviewed and approved by the Indiana University IRB as meeting the criteria for IRB approval as outlined in 45 CFR 46.111(a). I agree with the investigator's assessment above regarding whether the amendment is a minor or major amendment, unless otherwise noted.

Authorized IRB Signature: Sara Brand Digitally signed by sbrand@indiana.edu
DN: cn=sbrand@indiana.edu
Reason: I am approving this document
Date: 2012.02.28 16:13:52 -0500 IRB Approval Date: 02/28/2012

Printed Name of IRB Member: Sara Brand

For IU Human Subjects Office use only.

Recorded in the Minutes of: _____

INDIANA UNIVERSITY INSTITUTIONAL REVIEW BOARD (IRB)

STUDY AMENDMENT

Reviewing IRB (please choose one):

Biomedical: ☐ IRB-02 ☐ IRB-03 ☐ IRB-04 ☐ IRB-05
 Behavioral: ☐ IRB-01 ☒ IUB IRB

IRB STUDY NUMBER: 1110007261
 AMENDMENT NUMBER: Item 003 A002

Please type only in the gray boxes. To mark a box as checked, double-click the box, select "checked", and click "OK".

SECTION I: INVESTIGATOR INFORMATION

Principal Investigator:

Name (Last, First, Middle Initial): May, Lissa F.

Department: Music Education

Phone: 812-855-6343

E-Mail: lamay@indiana.edu

Additional Study Contact:

Name: Meredith Sleator-McNally

Phone: 509-496-2303

E-Mail: msleator@gmail.com

Project Title: **AN INVESTIGATION OF K-12 STRING TEACHERS' PERCEPTIONS OF MUSICAL OUTREACH AND THE NATIONAL STRING PROJECT CONSORTIUM IN DETROIT, MICHIGAN**

Sponsor/Funding Agency: n/a

Sponsor Number: n/a

Sponsor Amendment Number: n/a

SECTION II: STUDY INFORMATION

This study is:

- ☐ Open to enrollment
☒ Closed to enrollment

Number of active subjects: 8

SECTION III: AMENDMENT DESCRIPTION

- Provide a complete description of the proposed change(s) included in this amendment:
I would like to contact the respondents to see if any of them would be willing to answer some additional open-ended questions by email or by phone.
- State the justification/rationale for this amendment. If risks are being updated, please provide specific justification:
Though there are String programs in the Detroit-area, only 2 schools have students that are dually enrolled in the String Project and their school program. I have almost no data to answer my research questions. I would like to ask the people who did respond if they would be willing to answer some follow-up questions (attached) to gain a better understanding of their experience with the String Project and a better understanding of why they think that their students do or do not participate in the String Project.
- Is the study sponsored?
☒ No.
☐ Yes. Check the appropriate line below and provide with this amendment, as applicable:
☐ A copy of the sponsor's amendment, if the amendment came from the sponsor.
☐ A copy of your notice to the sponsor of this change, if you initiated the amendment.
☐ A copy of the approved amendment will be sent to the sponsor.
☐ None of the above apply. Please explain: _____
- Do the proposed change(s) described in this amendment alter the risk to benefit assessment?
☒ No.
☐ Yes. Please describe how the assessment is altered: _____
- Do the proposed change(s) described in this amendment require changes to the informed consent and/or assent document(s) or process?

- ☐ N/A. Informed consent, written documentation of informed consent, and/or assent has been waived for this study. Skip to item 6 below.
- ☒ No. Skip to item 6 below.
- ☐ Yes. Answer items A and B below.
- A. Check the appropriate line below.
- ☐ The new informed consent and/or assent document(s) are in addition to the current one(s).
- ☐ The new informed consent and/or assent document(s) replace the current one(s).
If there are multiple consent and/or documents for this study, please indicate which consent and/or assent document(s) are to be replaced. _____
- ☐ N/A. Changes are being made to the informed consent process only and informed consent document(s) will not change.
- B. Will enrolled subjects be informed of the change(s) described in this amendment?
- ☐ No. Please explain why not: _____
- ☐ Yes. Will enrolled subjects be re-consented and/or re-assented?
- ☐ Yes.
- ☐ No. Please explain how enrolled subjects will be notified: _____

SECTION IV: CO-INVESTIGATOR UPDATE

- ☒ This submission does NOT include additions or removals to the Investigator List. *Proceed to Section V.*
- ☐ This submission includes additions or removals to the Investigator List. The updated Investigator List is attached.

The following investigators are being added to the current Investigator List:

The following investigators are being **removed** from the Investigator List and will no longer be participating in this research:

SECTION V: AMENDMENT SUMMARY

Amendment includes:

- | | |
|-------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> Assent, dated: _____ | <input type="checkbox"/> Protocol, dated: _____ |
| Number of assent documents: _____ | <input checked="" type="checkbox"/> Recruitment materials (please list and date): <u>Follow Up Letter.docx (5/4/12)</u> |
| <input type="checkbox"/> Authorization, dated: _____ | <input type="checkbox"/> Request form(s) for vulnerable population(s) (please list and date); _____ |
| Number of authorizations: _____ | <input checked="" type="checkbox"/> Surveys, questionnaires (please list and date): <u>Follow Up Questions.docx (5/4/12)</u> |
| <input type="checkbox"/> Clinical Investigator's Brochure, dated: _____ | <input type="checkbox"/> Summary Safeguard Statement or HUD Form, dated: _____ |
| <input type="checkbox"/> Expedited Research Checklist, dated: _____ | <input type="checkbox"/> Study Information Sheet |
| <input type="checkbox"/> Exempt Research Checklist, dated: _____ | <input type="checkbox"/> Other (please list and date): _____ |
| <input type="checkbox"/> HIPAA & Recruitment Checklist, dated: _____ | |
| <input type="checkbox"/> Informed Consent, dated: _____ | |
| Number of consent documents: _____ | |
| <input type="checkbox"/> Investigator List, dated: _____ | |

NOTE: Only documents that are being changed as a result of the amendment should be attached and checked in items 6 above. Listing document dates are optional and only necessary if required by the investigator or sponsor.

NOTE TO INVESTIGATORS: Study amendments may not be instituted until approval from the IRB is given.

Please indicate the type of amendment you are submitting. Please see the Guidelines for Determining an Amendment Type available on the IU Human Subjects Office website for additional information. **Please note that the IRB makes the final determination with regard to whether or not the amendment is acceptable for expedited review or if it requires review at a convened IRB meeting.**

- ☒ **Minor Amendment.** Change(s) do not significantly affect the safety of subjects and is acceptable for expedited review per 45 CFR 46.110(b)(2)/21 CFR 56.110(b)(2).

- ☐ **Major Amendment.** Changes potentially involve increased risks or discomforts or decrease potential benefit. The amendment requires review at a convened IRB meeting.

SECTION VI: INVESTIGATOR STATEMENT OF COMPLIANCE

By submitting this form, the Principal Investigator assures that all information provided is accurate. He/she assures that procedures performed under this project will be conducted in strict accordance with federal regulations and Indiana University policies and procedures that govern research involving human subjects. He/she acknowledges that he/she has the resources required to conduct research in a way that will protect the rights and welfare of participants, and that he/she will employ sound study design which minimizes risks to subjects. He/she agrees to submit *any* change to the project (e.g. change in principal investigator, research methodology, subject recruitment procedures, etc.) to the Board in the form of an amendment for IRB approval prior to implementation.

SECTION VII: IRB APPROVAL

This amendment, including documentation noted above, has been reviewed and approved by the Indiana University IRB as meeting the criteria for IRB approval as outlined in 45 CFR 46.111(a). I agree with the investigator's assessment above regarding whether the amendment is a minor or major amendment, unless otherwise noted.

Authorized IRB Signature: Sara Brand Digitally signed by Sara Brand
DN: cn=Sara Brand, ou=Human Subjects Office,
ou=IU-RSCH, email=sbrand@iu.edu, c=US
Date: 2012.05.08 08:53:56 -0400 IRB Approval Date: 05/08/2012

Printed Name of IRB Member: _____

For IU Human Subjects Office use only.

Recorded in the Minutes of: _____

Appendix G

Recruitment Materials

Meredith L. Sleator-McNally
(Street Address)
Spokane, WA 99205
(phone number)
(email address)

(Teacher Name)
(Teacher Address)
(Teacher Address 2)

February 28, 2012

Dear String Teachers,

My name is Meredith Sleator-McNally. I am a fulltime Elementary Music teacher in Spokane, Washington and a Masters student in Music Education at Indiana University in Bloomington, Indiana. I am inviting you participate in a research project to study teachers' perceptions of outreach programs and the National String Project Consortium (NSPC) in the Detroit-area. I am asking you to look over the questionnaire and, if you choose to do so, complete it by March 6, 2012. It should take you about 15 minutes to complete.

The study information sheet is attached and the survey can be found by visiting www.surveymonkey.com/s/sleator-mcnally00. If you choose to participate, please click on the link to go directly to the survey. If you would prefer to complete a hard copy, please respond to this email and a copy will be sent to you.

The results of this project will be analyzed as part of my master's thesis. Through your participation, I hope to understand the perceived effect of the NSPC's String Projects on the school programs in the Detroit-area as well as develop a clearer picture of who participates in the String Project at Wayne. I hope that the results of the survey will be useful for improving partnerships between universities and public school music programs and determining what would be most beneficial for public school string programs across the country.

I do not know of any risks to you if you decide to participate in this survey outside of the risk for loss of confidentiality. Your responses will not be identified with you personally and confidentiality will be maintained to the best of my ability. To help me with this, please do not put your name or other identifying information on your survey. Upon completion of my thesis, all returned surveys and associated data will be destroyed.

The survey should take you about 15 minutes to complete. I hope you will take the time to complete this questionnaire and return it. Your participation is voluntary. Regardless of whether you choose to participate, please let me know if you would like a summary of my findings. To receive a summary, please contact me at the phone number below.

If you have any questions or concerns about completing the questionnaire or about being in this study, you may contact me at (phone number) or (email address)

Sincerely,

Meredith L. Sleator-McNally

Meredith L. Sleator-McNally
(Street Address)
Spokane, WA 99205
(phone number)
(email address)

(Teacher Name)
(Teacher Address)
(Teacher Address 2)

March 7, 2012

Dear String Teacher,

Last week you received an email from me inviting you to participate in a research project to study teachers' perceptions of outreach programs and the National String Project Consortium (NSPC) in the Detroit-area. I am writing again to request your participation. Below is a link to a short questionnaire that asks a variety of questions about your school, your students and your experience with the String Project at Wayne. I am asking you to look over the questionnaire and, if you choose to do so, complete it by March 14, 2012. It should take you about 15 minutes to complete.

The study information sheet is attached and the survey can be found by visiting www.surveymonkey.com/s/sleator-mcnally00. If you choose to participate, please click on the link to go directly to the survey. If you would prefer to complete a hard copy, please respond to this email and a copy will be sent to you.

The results of this project will be analyzed as part of my master's thesis. Through your participation, I hope to understand the perceived effect of the NSPC's String Projects on the school programs in the Detroit-area as well as develop a more clear picture of who participates in the String Project at Wayne. I hope that the results of the survey will be useful for improving partnerships between universities and public school music programs

and determining what would be most beneficial for public school string programs across the country.

I do not know of any risks to you if you decide to participate in this survey outside of the risk for loss of confidentiality. Your responses will not be identified with you personally and confidentiality will be maintained to the best of my ability. To help me with this, please do not put your name or other identifying information on your survey. Upon completion of my thesis, all returned surveys and associated data will be destroyed.

The survey should take you about 15 minutes to complete. I hope you will take the time to complete this questionnaire and return it. Your participation is voluntary. Regardless of whether you choose to participate, please let me know if you would like a summary of my findings. To receive a summary, please contact me at the phone number below.

If you have any questions or concerns about completing the questionnaire or about being in this study, you may contact me at (phone number) or (email address)

Sincerely,

Meredith L. Sleator-McNally

Meredith L. Sleator-McNally
(Street Address)
Spokane, WA 99205
(phone number)
(email address)

(Teacher Name)
(Teacher Address)
(Teacher Address 2)

March 15, 2012

Dear String Teacher,

Two weeks ago, you received an email from me inviting you to participate in a research project to study teachers' perceptions of outreach programs and the National String Project Consortium (NSPC) in the Detroit-area. I am writing again to request your participation. Below is a link to a short questionnaire that asks a variety of questions about your school, your students and your experience with the String Project at Wayne. I am asking you to look over the questionnaire and, if you choose to do so, complete it by March 22, 2012. It should take you about 15 minutes to complete.

The study information sheet is attached and the survey can be found by visiting www.surveymonkey.com/s/sleator-mcnally00. If you choose to participate, please click on the link to go directly to the survey. If you would prefer to complete a hard copy, please respond to this email and a copy will be sent to you.

The results of this project will be analyzed as part of my master's thesis. Through your participation, I hope to understand the perceived effect of the NSPC's String Projects on the school programs in the Detroit-area as well as develop a more clear picture of who participates in the String Project at Wayne. I hope that the results of the survey will be useful for improving partnerships between universities and public school music programs and determining what would be most beneficial for public school string programs across the country.

I do not know of any risks to you if you decide to participate in this survey outside of the risk for loss of confidentiality. Your responses will not be identified with you personally and confidentiality will be maintained to the best of my ability. To help me with this, please do not put your name or other identifying information on your survey. Upon completion of my thesis, all returned surveys and associated data will be destroyed.

The survey should take you about 15 minutes to complete. I hope you will take the time to complete this questionnaire and return it. Your participation is voluntary. Regardless of whether you choose to participate, please let me know if you would like a summary of my findings. To receive a summary, please contact me at the phone number below.

If you have any questions or concerns about completing the questionnaire or about being in this study, you may contact me at (phone number) or (email address)

Sincerely,

Meredith L. Sleator-McNally

Meredith L. Sleator-McNally
(Street Address)
Spokane, WA 99205
(phone number)
(email address)

(Teacher Name)
(Teacher Address)
(Teacher Address 2)

February 29, 2012

Dear String Teacher,

My name is Meredith Sleator-McNally. I am a fulltime Elementary Music teacher in Spokane, Washington and a Masters student in Music Education at Indiana University in Bloomington, Indiana. I am inviting you participate in a research project to study teachers' perceptions of outreach programs and the National String Project Consortium (NSPC) in the Detroit-area. I am asking you to look over the questionnaire and, if you choose to do so, complete it by March 6, 2012. It should take you about 15 minutes to complete.

The study information sheet and survey are attached. Additionally, the survey can be found by visiting www.surveymonkey.com/s/sleator-mcnally01. If you choose to participate, please either return the survey in the enclosed envelope or use the link to go directly to the survey.

The results of this project will be analyzed as part of my master's thesis. Through your participation, I hope to understand the perceived effect of the NSPC's String Projects on the school programs in the Detroit-area as well as develop a clearer picture of who participates in the String Project at Wayne. I hope that the results of the survey will be useful for improving partnerships between universities and public school music programs and determining what would be most beneficial for public school string programs across the country.

I do not know of any risks to you if you decide to participate in this survey outside of the risk for loss of confidentiality. Your responses will not be identified with you personally and confidentiality will be maintained to the best of my ability. To help me with this, please do not put your name or other identifying information on your survey. Upon completion of my thesis, all returned surveys and associated data will be destroyed.

The survey should take you about 15 minutes to complete. I hope you will take the time to complete this questionnaire and return it. Your participation is voluntary. Regardless of whether you choose to participate, please let me know if you would like a summary of my findings. To receive a summary, please contact me at the phone number below.

If you have any questions or concerns about completing the questionnaire or about being in this study, you may contact me at (phone number) or (email address)

Sincerely,

Meredith L. Sleator-McNally

Meredith L. Sleator-McNally
 (Street Address)
 Spokane, WA 99205
 (phone number)
 (email address)

(Teacher Name)
 (Teacher Address)
 (Teacher Address 2)

March 8, 2012

Dear String Teacher,

Last week you received a letter from me inviting you to participate in a research project to study teachers' perceptions of outreach programs and the National String Project Consortium (NSPC) in the Detroit-area. I am writing again to request your participation. Below is a link to a short questionnaire that asks a variety of questions about your school, your students and your experience with the String Project at Wayne. I am asking you to look over the questionnaire and, if you choose to do so, complete it by March 14, 2012. It should take you about 15 minutes to complete.

The study information sheet and survey are attached. Additionally, the survey can be found by visiting www.surveymonkey.com/s/sleator-mcnally01. If you choose to participate, please either return the survey in the enclosed envelope or use the link to go directly to the survey.

The results of this project will be analyzed as part of my master's thesis. Through your participation, I hope to understand the perceived effect of the NSPC's String Projects on the school programs in the Detroit-area as well as develop a more clear picture of who participates in the String Project at Wayne. I hope that the results of the survey will be useful for improving partnerships between universities and public school music programs and determining what would be most beneficial for public school string programs across the country.

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The survey should take you about 15 minutes to complete. I hope you will take the time to complete this questionnaire and return it. Your participation is voluntary. Regardless of whether you choose to participate, please let me know if you would like a summary of my findings. To receive a summary, please contact me at the phone number below.

If you have any questions or concerns about completing the questionnaire or about being in this study, you may contact me at (phone number) or (email address)

Sincerely,

Meredith L. Sleator-McNally

Meredith L. Sleator-McNally
(Street Address)
Spokane, WA 99205
(phone number)
(email address)

(Teacher Name)
(Teacher Address)
(Teacher Address 2)

March 16, 2012

Dear String Teacher,

Two weeks ago, you received a letter from me inviting you to participate in a research project to study teachers' perceptions of outreach programs and the National String Project Consortium (NSPC) in the Detroit-area. I am writing again to request your participation. Below is a link to a short questionnaire that asks a variety of questions about your school, your students and your experience with the String Project at Wayne. I am asking you to look over the questionnaire and, if you choose to do so, complete it by March 22, 2012. It should take you about 15 minutes to complete.

The study information sheet and survey are attached. Additionally, the survey can be found by visiting www.surveymonkey.com/s/sleator-mcnally01. If you choose to participate, please either return the survey in the enclosed envelope or use the link to go directly to the survey.

The results of this project will be analyzed as part of my master's thesis. Through your participation, I hope to understand the perceived effect of the NSPC's String Projects on the school programs in the Detroit-area as well as develop a more clear picture of who participates in the String Project at Wayne. I hope that the results of the survey will be useful for improving partnerships between universities and public school music programs and determining what would be most beneficial for public school string programs across the country.

I do not know of any risks to you if you decide to participate in this survey outside of the risk for loss of confidentiality. Your responses will not be identified with you personally and confidentiality will be maintained to the best of my ability. To help me with this, please do not put your name or other identifying information on your survey. Upon completion of my thesis, all returned surveys and associated data will be destroyed.

The survey should take you about 15 minutes to complete. I hope you will take the time to complete this questionnaire and return it. Your participation is voluntary. Regardless of whether you choose to participate, please let me know if you would like a summary of my findings. To receive a summary, please contact me at the phone number below.

If you have any questions or concerns about completing the questionnaire or about being in this study, you may contact me at (phone number) or (email address)

Sincerely,

Meredith L. Sleator-McNally

Meredith L. Sleator-McNally
(Street Address)
Spokane, WA 99205
(phone number)
(email address)

(Teacher Name)
(Teacher Address)
(Teacher Address 2)

(Date)

Dear (String Teacher),

Thank you for your participation in my study, *An Investigation of K-12 Public School String Teachers' Perceptions of Musical Outreach and the National String Project Consortium in Detroit, Michigan*. I know that you have a busy schedule and are asked to involve yourself in many different activities. I appreciate the time that you have invested in my research.

I am anticipating that I will have all results analyzed by the end of July, 2012. I would be more than happy to share the final product with you. If you would like a copy, please contact me using the information above and I will send one upon completion.

Thank you again for your participation!

Sincerely,

Meredith L. Sleator-McNally

Meredith L. Sleator-McNally
 (Street Address)
 Spokane, WA 99205
 (phone number)
 (email address)

(Teacher Name)
 (Teacher Address)
 (Teacher Address 2)

(Date)

Dear (Teacher Name),

Thank you again for completing my survey last month. I appreciate your support! I am looking for a few teachers who would be interested in answering a few follow up questions to help answer my research questions and clarify some of the responses I received. If you are willing to participate, please respond to this email answering the questions attached below or contact me to arrange a time to answer them over the phone.

I do not know of any risks to you if you choose to respond, outside of the risk for loss of confidentiality .Data will be stored securely and only the researcher will have access to it. Any data submitted online will be stored separately from all identifying information. Your responses will not be identified with you personally and confidentiality will be maintained to the best of my ability. Upon completion of my thesis, all responses and related material will be destroyed.

Your participation in this is voluntary and the questions should take you only a few minutes to complete.

If you have any questions or concerns please contact me at (phone number) or (email address)

Sincerely,
 Meredith Sleator-McNally